Technical Memorandum

Phase 3 Chemical Data Gap Investigation Sampling Results Subarea 5A Santa Susana Field Laboratory Ventura County, California

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Sampling Results
Subarea 5A
Santa Susana Field Laboratory
Ventura County, California

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Acronyms and Abbreviations

%	percent
%D	percent difference/percent drift
%R	percent recovery
mg/kg	milligram per kilogram
mg/L	milligram per liter
ng/kg	nanogram per kilogram
pg/L	picogram per liter
µg/kg	microgram per kilogram
µg/L	microgram per liter
<	less than
Ag	silver
AOC	Administrative Order on Consent
AST	above-ground storage tank
ASTM	ASTM International Type II
BaP	benzo-a-pyrene
bgs	below ground surface
BHC	benzene hexachloride
CAS	chemical abstract number
CDD	chlorinated dibenzo-p-dioxins
CDF	chlorinated dibenzofurans
CDM Smith	CDM Federal Programs Corporation
CoC	chain-of-custody
Cr(VI)	hexavalent chromium
DOE	Department of Energy
DPT	direct push technology
DQI	data quality indicator
DQO	data quality objective
DTSC	Department of Toxic Substances Control
DUAR	data usability assessment review
EFH	extractable fuel hydrocarbon
EMPC	estimated maximum possible concentration
EPA	U.S. Environmental Protection Agency
ESA	Ecological Sensitive Area
FSDF	Former Sodium Disposal Facility
FSDS	field sample data sheet
FSP	field sampling plan
ft	feet
FTL	field team leader
GIS	geographic information system
GPS	global positioning system
GRO	gasoline range organics
HSA	Historical Site Assessment
HpCDF	heptachlorodibenzofuran
HxCDF	hexachlorodibenzofuran

ICP	inductively coupled plasma
ID	identifier
ISF	interim storage facility
ISL	interim screening level
J	estimated
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LL	Eurofins Lancaster Laboratories
Master FSP	Master Field Sampling Plan
MCPA	2-methyl-4-chlorophenoxyacetic acid
MCPP	methylchlorophenoxypropionic acid
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
MWH	MWH Americas, Inc.
NBZ	Northern Buffer Zone
ND	nondetect
NDMA	n-nitrosodimethylamine
NW	northwest
OCDD	octachlorodibenzodioxin
OCDF	octachlorodibenzofuran
OSWER	Office of Solid Waste and Emergency Response
PAH	polycyclic aromatic hydrocarbon
PARCCS	precision, accuracy, representativeness, comparability, completeness and sensitivity
Pb	lead
PCB	polychlorinated biphenyl
PCT	polychlorinated triphenyl
PECDF	pentachlorodibenzofuran
PID	photoionization detector
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFI	Facility Investigation Reports
RL	reporting limit
RMHF	Radioactive Material Handling Facility
RPD	relative percent difference
SDG	sample delivery group
SE	southeast
SIM	selective ion monitoring
SNAP	Streamlined New Acquisition Process
SOP	standard operating procedure
SOW	statement of work
SRE	Sodium Reactor Experiment
SSFL	Santa Susana Field Laboratory
SVOC	semivolatile organic compound

TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TEQ	toxicity equivalence
TEF	toxicity equivalence factor
TM	technical memorandum
TPH	total petroleum hydrocarbon
U	nondetect
UJ	estimated nondetect
VOC	volatile organic compound
Zn	zinc
2,4,5-T	2,4,5-trichlorophenoxyacetic acid
2,4-D	2,4-dichlorophenoxyacetic acid
2,4-DB	2,4-dichlorophenoxy butyric acid

Section 1
Introduction

This Technical Memorandum (TM) presents the results of chemical analyses of surface and subsurface soil samples collected between May and December 2013 from Phase 3 soil borings within Subarea 5A at the Santa Susana Field Laboratory (SSFL) site in Ventura County, California. This work was performed under three planning documents:

- *Master Field Sampling Plan for Chemical Data Gap Investigation Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Federal Programs Corporation [CDM Smith] 2012a) (Master Field Sampling Plan [FSP])
- *Addendum No. 4 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 5A*(CDM Smith 2012b) (Addendum to the Master FSP)
- *Phase 3 Subarea 5A North Implementation Plan, Santa Susana Field Laboratory* (United States Department of Energy [DOE] 2013)

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

The Implementation Plan (DOE 2013) referenced above supplements the Subarea 5A Data Gap Analysis TM that was submitted as Attachment 1 in Addendum Number 4 to the Master FSP (CDM Smith 2012b). The Implementation Plan (DOE 2013) provided a re-evaluation of total sampling needs for Subarea 5A deferring sampling decisions until the "Go-Back" [1] assessment was completed. Based on that assessment some locations were determined no longer necessary or were deferred to the remedial planning stage. For those locations sampled, they will be reported in the "Go-Back" TM. The associated analytical results will be reported in a separate TM for the trenching and "Go-Back" sampling.

This TM also provides a description of the sampling activities and a discussion of the analytical data review findings for Phase 3 sampling in Subarea 5A. The TM does not provide an interpretation of the results. The data provided in this TM are intended to be combined with data collected under the prior Resource Conversation and Recovery Act (RCRA) Facility Investigation and the chemical collocated sampling program (Phase 1 sampling) to support the Soil Remedial Action Implementation Plan for chemicals in soil in Area IV. The collocated sampling program was Phase 1 of the chemical investigation activities under the Administrative Order on Consent (AOC) or Remedial Action [Docket

[1] During the "Go Back" evaluation that occurred the spring of 2014, DOE evaluated the totality of information collected for Area IV along with the proposed cleanup standards. This evaluation included proposed sample locations within Subarea 5A to determine their necessity for completing characterization objectives. Some locations were not sampled based on this assessment.

Number HSA-CO 10/11-037] between DOE and the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) (DTSC 2010).

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

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

The document, *Subarea 5A Data Gap Analysis Technical Memorandum, Santa Susana Field Laboratory, Ventura County, California*, (SA 5A Data Gap Analysis TM) was prepared by MWH America's, Inc. (MWH) and included as an attachment to *Addendum No. 4 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 5A* (CDM Smith 2012b). The Subarea 5A North Implementation Plan (DOE 2013) was developed in 2013 because new information had become available since submittal of the Subarea 5A Data Gap Analysis TM, including final Chemical Look-Up Table values issued by DTSC in June 2013 and receipt of Phase 3 sampling results for Subareas 5C, 5B, 3, 6, and 7. The data gap analysis provides the rationale for selection of each sample location and the chemical sampling rationale.

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

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

1.2 Geology

Subarea 5A of Area IV is underlain by the Chatsworth Formation, which is composed predominantly of sandstone interbedded with siltstone and shale. The overlying native soils encountered in Subarea 5A range from predominantly silty sands to sandy silts at shallow depths with increasing clay content to 10 feet below ground surface (bgs). Disturbed areas in Subarea 5A are comprised of fill soils of unknown origin and debris such as concrete, asphalt, and wood. The contact with lithified Chatsworth Formation at many soil boring locations occurs between 1 and 10 feet bgs in Subarea 5A. Additional information regarding the geology in Area IV can be found in Volume I of *Group 5 – Central Portion of Areas III and IV RCRA Facility Investigation Report, Santa Susana Field Laboratory, Ventura County, California* (CH2M Hill 2008).

1.3 Technical Memorandum Organization

This TM includes the following sections:

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

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Section 2
Field Sampling and Analytical Methods

Two hundred soil samples were collected from 115 Phase 3 locations in Subarea 5A between May 28 and June 29, 2013 and between November 11 and December 2, 2013. The majority of the Phase 3 soil borings in Subarea 5A were advanced to between approximate depths of 0.3 and 10 feet bgs, with a few locations reaching total depths greater than 10 feet bgs. Notably, one location, SL-508, within the vicinity of Building 4024, reached a total depth of 34.4 feet below bgs. Sample locations and depths from Subarea 5A are shown on Figure 2-1. Appendix E also provides the specific boring log for each sample location.

Table 2-1includes the data gap rationale for sampling at each Subarea 5A location, along with the location description, sample numbers, sample type, date of sample collection, depth of boring, analyses sampled for, description of any fill materials encountered, and reasons for not sampling some of the locations proposed in the Data Gap Analysis TMs (CDM Smith 2012b and 2013). As discussed in Section 1, sampling of some Subarea 5A locations was deferred. Sampling of test pits was also deferred to be accomplished as one event across Area IV. *Addendum No. 11 to Master Field Sampling Plan for Chemical Data Gap Investigation Phase 3 Go-Back Soil Chemical Sampling at Area IV SSFL, Ventura, Country, California, Subarea 5A, 5D, 8 and Northern Buffer Zone* (CDM Smith 2014) for the trenching and "Go-Back" sampling identified all trench and test pit locations to be sampled. The data TM for the "Go Back" and test pit results will present what was accomplished. Samples proposed within cultural or ecological sensitive areas (ESA) may not have been collected. If needed for remediation ESA sampling would take place during the soil remediation phase of the project and under the supervision of the cultural/biological monitors.

The Chemical Data Summary Report will provide additional discussion on how deferred sample locations will be addressed.

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

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Legend

- Sample Location
- Area IV Subarea
- Site Area

Subarea 5A Phase 3 Sample Locations

0 80 160 320 Feet

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

CDM Smith

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Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-508	West of Building 4024	Location targets fill from unknown origin west of B4024 observed at SL-245-SA5A to 30 ft (fill extent shown on 1961 B4024 facility drawing and likely placed during original construction activities); positioned near outside storage. Bedrock anticipated ~30 ft bgs. Collect samples at 5 ft intervals to 20 ft, then every 10 ft to bedrock with the deepest sample just above bedrock; analyze all depths to characterize fill.	34.4	Asphalt at surface. 0-24.0 ft bgs: fill described as weathered sandstone formation and igneous gravel with red brick clasts 21-22 ft bgs. 24-34.4 ft bgs: fill described as weathered sandstone formation and red brick clasts. Refusal on bedrock.	11/14/2013	Surface	SL-508-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/14/2013	Subsurface	SL-508-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/14/2013	Subsurface	SL-508-SA5A-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/14/2013	Subsurface	SL-508-SA5A-SB-17.0-18.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/14/2013	Subsurface	SL-508-SA5A-SB-21.0-22.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/14/2013	Subsurface	SL-508-SA5A-SB-33.0-34.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-518	Southwest of Building 4024	Location targets AST with unknown contents (AT-HS-5) identified in the Sitewide Tank Inventory (CH2M Hill, 2011); positioned adjacent to undefined feature observed in 1978 photograph (HDMSm000000249). Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with the deepest sample just above bedrock.	17.1	0-11 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/19/2013	Surface	SL-518-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/19/2013	Subsurface	SL-518-SA5A-SB-7.0-8.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, 1,4 Dioxane EPA 8260 SIM, TPH-GRO EPA 8015, VOC EPA 8260
					11/19/2013	Subsurface	SL-518-SA5A-SB-10.0-11.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, 1,4 Dioxane EPA 8260 SIM, TPH-GRO EPA 8015, VOC EPA 8260
					11/19/2013	Subsurface	SL-518-SA5A-SB-15.0-16.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-521	Cooling Tower 4928 (South of Building 4024)	Location targets cooling tower and sump located south of B4024, cooling tower analytical suite (formaldehyde and Cr[VI]] included. Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with the deepest sample just above bedrock.	15.5	0-0.3 ft bgs: Concrete. 0.3-8.0 ft bgs: fill described as igneous/metamorphic gravel. Red brick fragments found throughout with weathered sandstone formation encountered around 11 ft bgs to depth. Also, twigs/wood were encountered around 11 ft bgs.	11/14/2013	Surface	SL-521-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TIC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					11/14/2013	Subsurface	SL-521-SA5A-SB-9.0-10.0	TPH-GRO EPA 8015, Dioxins EPA 1613, Formaldehyde EPA 8315, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TIC EPA 8270, TPH-EFH EPA 8015
					11/14/2013	Subsurface	SL-521-SA5A-SB-11.0-12.0	1,4 Dioxane EPA 8260 SIM, TPH-GRO EPA 8015, VOC EPA 8260, Dioxins EPA 1613, Formaldehyde EPA 8315, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TIC EPA 8270, TPH-EFH EPA 8015
					11/14/2013	Subsurface (Duplicate)	SL-821-SA5A-SB-11.0-12.0	1,4 Dioxane EPA 8260 SIM, TPH-GRO EPA 8015, VOC EPA 8260, Dioxins EPA 1613, Formaldehyde EPA 8315, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TIC EPA 8270, TPH-EFH EPA 8015
					11/14/2013	Subsurface	SL-521-SA5A-SB-14.0-15.0	1,4 Dioxane EPA 8260 SIM, TPH-GRO EPA 8015, VOC EPA 8260, Dioxins EPA 1613, Formaldehyde EPA 8315, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TIC EPA 8270, TPH-EFH EPA 8015
5A_DG-584	North of Building 4023	Location targets two ASTs with unknown contents (Unknown-AT-L9-1, -2) located north of B4023. Bedrock is anticipated at ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	0.7	0-0.7 ft bgs: fill described as weathered sandstone formation. Refusal on bedrock.	11/25/2013	Surface	SL-584-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-587	Within Building 4023 Footprint	Location targets AST with unknown contents (Unknown-AT-L9-3) and linear magnetometer anomaly; positioned within medium toned mounded material identified in EPA tech memo and fill of unknown origin observed in borings within B4023. Bedrock is anticipated at ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths. Conduct adjacent test pit for linear magnetometer anomaly and adjust 5 ft sample to target feature (or sample pit as appropriate).	TRENCH					

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-596	Northwest of Building 4005	Step out for mercury and TPH in nearby samples and targets ASTs with unknown contents; also characterizes open storage/operational area. Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths.	5.3	0-0.25 ft bgs: fill described as asphalt. 0-2.6 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/19/2013	Surface	SL-596-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					11/19/2013	Subsurface	SL-596-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-616	West Side of Building 4042	Location targets sewer discharge location from B4042; also characterizes operational area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths.	0.9	0-0.9 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	12/2/2013	Surface	SL-616-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-628	Within Building 4042 Footprint	Location targets former B4042 footprint and adjacent to operations associated with alcohol ASTs. Analyze 0.5 ft and 5 ft samples due to demolition soil disturbance.	7.8	0-5.0 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/12/2013	Surface	SL-628-SA5A-SB-0.0-0.5	Alcohols EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/12/2013	Surface (Duplicate)	SL-928-SA5A-SB-0.0-0.5	Alcohols EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/12/2013	Subsurface	SL-628-SA5A-SB-6.5-7.5	Alcohols EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-630A	Transformer Southeast of Building 4042	Transformers in Area IV with previous ND results are being resampled with discrete samples. Collect samples at four discrete locations and analyze 0.5 ft samples for PCBs.	0.5	0-0.5 ft bgs: None indicated. Refusal on bedrock.	11/11/2013	Surface	SL-630A-SA5A-SB-0.0-0.5	PCBs/PCTs EPA 8082
5A_DG-630B	Transformer Southeast of Building 4042		0.5	0-0.5 ft bgs: None indicated. No refusal.	11/11/2013	Surface	SL-630B-SA5A-SB-0.0-0.5	PCBs/PCTs EPA 8082
5A_DG-630C	Transformer Southeast of Building 4042		0.5	0-0.5 ft bgs: None indicated. No refusal.	11/11/2013	Surface	SL-630C-SA5A-SB-0.0-0.5	PCBs/PCTs EPA 8082
5A_DG-630D	Transformer Southeast of Building 4042		0.5	0-0.5 ft bgs: None indicated. No refusal.	11/11/2013	Surface	SL-630D-SA5A-SB-0.0-0.5	PCBs/PCTs EPA 8082
5A_DG-631	Eastern Portion of Open Storage / Parking Area Near 12th and G Street	Location targets drainage adjacent to medium toned material and open storage. Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	0.5	0-0.5 ft bgs: fill described as weathered sandstone formation.	11/25/2013	Surface	SL-631-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-634	Southeast of Building 4042	Location targets AST with unknown contents; also characterizes area around cooling tower identified in facility drawings. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	0.5	0-0.5 ft bgs: None indicated. Refusal on bedrock.	11/11/2013	Surface	SL-634-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TIC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-636	East of Building 4042	Location targets geophysical anomaly; also characterizes operational area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; hold deeper sample pending shallower results. Conduct adjacent test pit for geophysical anomaly. Adjust 5 ft sample to target feature (or sample pit as appropriate).	TRENCH					
5A_DG-654	Northwest of Coal Storage / Parking Area Near 17th and G Street	Location targets a potential AST and undefined features observed in 1978 aerial photograph. Analyze 0.5 ft and 5 ft samples based on potential for disturbed soils noted in aerial. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.7	0-2.0 ft bgs: fill described as trace of weathered sandstone formation gravel.	11/13/2013	Surface	SL-654-SA5A-SB-0.0-0.5	pH EPA 9045, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015
					11/13/2013	Subsurface	SL-654-SA5A-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/13/2013	Subsurface (Duplicate)	SL-954-SA5A-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-657	North of Coal Storage / Parking Area Near 17th and G Street	Location targets potential storage area based on aerial photographs. Analyze 0.5 ft and 5 ft samples based on potential for disturbed soils noted in aerial. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.9	0-5.5 ft bgs: fill described as trace of igneous/metamorphic gravel and weathered sandstone formation gravel.	11/13/2013	Surface	SL-657-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/13/2013	Subsurface	SL-657-SA5A-SB-4.0-5.0	TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
					11/13/2013	Subsurface	SL-657-SA5A-SB-7.0-8.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-658	North of Coal Storage / Parking Area Near 17th and G Street	Location targets unlined surface water flow pathway along the northern perimeter of the Coal Storage/Parking Area. Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths based on potential for vertical migration of surface water/contaminants.	8	0-7.4 ft bgs: fill described as weathered sandstone formation gravel. Refusal on bedrock.	11/13/2013	Surface	SL-658-SA5A-SB-0.0-0.5	pH EPA 9045, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015
					11/13/2013	Subsurface	SL-658-SA5A-SB-4.0-5.0	TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
					11/13/2013	Subsurface	SL-658-SA5A-SB-7.0-8.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-667	Coal Storage / Parking Area Near 17th and G Street	Representative sample to characterize the Coal Storage/Parking Area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4	0-4.0 ft bgs: fill gravel described as igneous/metamorphic gravel.	11/13/2013	Surface	SL-667-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/13/2013	Subsurface	SL-667-SA5A-SB-3.0-4.0	TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
5A_DG-670	Coal Storage / Parking Area Near 17th and G Street	Same as 5A_DG-667; also targets former structures.	2.6	0-2.6 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/13/2013	Surface	SL-670-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-673	East of Coal Storage / Parking Area Near 17th and G Street	Location targets unlined surface water flow pathway along the eastern perimeter of the Coal Storage/Parking Area. Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths to assess potential for vertical migration of surface water/contaminants.	11.5	0-10.6 ft bgs: fill described as igneous/metamorphic gravel with weathered sandstone formation and occasional trace of red brick. Refusal on bedrock.	11/22/2013	Surface	SL-673-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/22/2013	Subsurface	SL-673-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/22/2013	Subsurface	SL-673-SA5A-SB-10.5-11.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-676	East of Coal Storage / Parking Area Near 17th and G Street	Location targets open space east of Coal Storage/Parking Area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	11.5	0-5.0 ft bgs: fill described as igneous/metamorphic gravel with weathered sandstone formation and occasional trace of red brick. Refusal on bedrock.	11/22/2013	Surface	SL-676-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/22/2013	Subsurface	SL-676-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-679	East of Building 4042	Location targets disturbed vegetation/soil noted in aerial photographs; also characterizes operational area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	0.6	None indicated. Refusal on bedrock.	12/2/2013	Surface	SL-679-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-686	Eastern Portion of Open Storage / Parking Area Near 12th and G Street	Location targets dark toned material and open storage. Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.5	0-2.5 ft bgs: fill described as igneous/metamorphic gravel with red brick. Refusal on bedrock.	11/22/2013	Surface	SL-686-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					11/22/2013	Surface (Duplicate)	SL-986-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Herbicides EPA 8151, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-696	Within Building 4123 Footprint	Location targets B4123 footprint (Kinetic Experiment Water Boiler [KEWB] Waste Storage Yard); also characterizes and/or delineates fill of unknown origin. Note that RFI and EPA collocated sample locations targeting B4123 were inadvertently placed ~50 ft east of former building footprint. Bedrock anticipated between 5 ft and 10 ft. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5	0-4.9 ft bgs: fill described as igneous/metamorphic gravel with burnt twig wood 0-2.5 ft bgs. Refusal on bedrock.	11/18/2013	Surface	SL-696-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/18/2013	Subsurface	SL-696-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-708	Open Space South of Building 4093 Leach Field	Step out from SL-111-SA5A (dioxins detected above ISLs) and SL-253-SA5A (dioxins and pesticides detected above ISLs); also characterizes area downslope of operations. Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	9.8	0-1.2 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation.	11/19/2013	Surface	SL-708-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/19/2013	Surface (Duplicate)	SL-1008-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/19/2013	Subsurface	SL-708-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-709	Building 4093 Leach Field	Recollect at SL-148-SA5A to analyze for terphenyls within B4093 leach field (terphenyl tank present in B4093). Bedrock anticipated <15 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all samples for terphenlys and analyze 0.5 ft sample for full suite since shallow sample at SL-148-SA5A not collected.	9.3	0-2.5 ft bgs: fill described as sandstone formation and igneous/metamorphic gravel 2.5-6.8 ft bgs. Refusal on bedrock.	11/18/2013	Surface	SL-709-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Terphenyls EPA 8015, TPH-EFH EPA 8015, pH EPA 9045
					11/18/2013	Subsurface (Duplicate)	SL-1009-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, Terphenyls EPA 8015, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/18/2013	Subsurface	SL-709-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, Terphenyls EPA 8015, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					11/18/2013	Subsurface	SL-709-SA5A-SB-8.0-9.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, Terphenyls EPA 8015, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-710	Open Space South of Building 4093 Leach Field	Location targets former road downslope of the former leach field and upslope of the drainage along 12th St (dioxins and PAHs detected above ISLs); also characterizes area downslope of disturbed ground identified by EPA in the 1995 aerial photograph. Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.5	0-1.5 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/18/2013	Surface	SL-710-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-713	Parking Area between Buildings 4073 and 4083	Representative location to characterize former parking lot and open storage observed in 1988 oblique photograph; positioned downslope of operational area. Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.1	0-1.8 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-713-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/26/2013	Subsurface	SL-713-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-715	Building 4633	Location targets former B4633, the Reactor Cooling Water Pad. Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	6.8	0-4.5 ft bgs: fill described as weathered sandstone formation with a trace of igneous/metamorphic gravel around 1 ft bgs. Refusal on bedrock.	11/25/2013	Surface	SL-715-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TIC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					11/25/2013	Surface (Duplicate)	SL-1015-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TIC EPA 8270, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					11/25/2013	Subsurface	SL-715-SA5A-SB-6.0-7.0	Dioxins EPA 1613, Formaldehyde EPA 8315, Hexavalent Chromium EPA 7196/7199, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TIC EPA 8270, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-719	Building 4093	Step out from SL-167-SA5A (metals [Hg 15x ISL] and TPH detected above ISLs); positioned near entrance to B4093 (terphenyl tank present in B4093). Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.1	0-1.1 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-719-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Terphenyls EPA 8015, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-720	Southeast of Building 4093	Representative location to characterize operational area (terphenyl tank present in B4093). Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.8	0-0.8 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-720-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, Terphenyls EPA 8015, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-722	Drainage East of Building 4093 Leach Field	Representative location to characterize drainage downslope of operational area. Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.8	0-5.0 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/18/2013	Surface	SL-722-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-724	Southeast of Building 4093	Representative location to characterize operational area between B4093 and B4453; positioned near a former road. Bedrock anticipated ~5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.1	0-1.7 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-724-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-730	Open Space West of Building 4453	Location targets three point magnetometer anomalies and inline with interpreted drain remnant. Bedrock anticipated between 5 ft and 10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths. Conduct adjacent test pit for three point magnetometer anomalies and interpreted drain remnant and adjust 5 ft sample to target feature (or sample pit as appropriate).	TRENCH					

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-732	Open Space Southwest of Building 4453	Location targets former road and vegetation clearance area observed in 1980 aerial photograph. Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.2	0-5.0 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/19/2013	Surface	SL-732-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-735	Open Space Southeast of Building 4453	Representative location to characterize open space downslope of operational areas; positioned on flat area adjacent to road. Bedrock anticipated <5 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.4	0-1.6 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation from 1.6-2.8. Refusal on bedrock.	11/18/2013	Surface	SL-735-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/18/2013	Subsurface	SL-735-SA5A-SB-2.5-3.5	TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
5A_DG-736	Open Space Southwest of Building 4453	Location targets vegetation clearance area observed in 1980 aerial photograph. Bedrock anticipated ~10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.9	0-2.6 ft bgs: fill described as igneous/metamorphic gravel. Refusal on bedrock.	11/18/2013	Surface	SL-736-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/18/2013	Subsurface	SL-736-SA5A-SB-3.0-4.0	TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015
5A_DG-738		Location targets disturbed ground area identified in EPA technical memorandum present in the 1995 aerial photograph (possible location of leach field) and characterizes open space downslope of an operational area. Bedrock anticipated between 5 ft and 10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.2	0-2.2 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-738-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/26/2013	Subsurface	SL-738-SA5A-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-767	South of Building 4641	Representative location to characterize open area downslope of an operational area; positioned at intersection of two surface flow pathways. Bedrock anticipated between 5 ft and 10 ft bgs. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.5	0-3.2 ft bgs: fill described as igneous/metamorphic gravel with sandstone formation. Refusal on bedrock.	11/26/2013	Surface	SL-767-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					11/26/2013	Subsurface	SL-767-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-772	West of Open Storage Area Along G Street	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	15	None indicated. Refusal on bedrock.	6/4/2013	Surface	SL-772-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-773	West of Open Storage Area Along G Street	Step out for dioxins, PAHs, and pesticides at SL-031-SA5A; location also assesses potential disposal along south side of G Street adjacent to the open storage area identified as "Waste Disposal Area" in EPA HSA. Shallow bedrock anticipated based on previous sampling in the area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	9.6	None indicated. Refusal on bedrock.	6/10/2013	Surface	SL-773-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-774	Southwest of Open Storage Area Along G Street	Step out for dioxins, PAHs, and pesticides at SL-031-SA5A and dioxins at SL-024-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.5	None indicated. Refusal on bedrock.	6/10/2013	Surface	SL-774-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					6/10/2013	Surface (Duplicate)	SL-1174-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-775	Southwest of Open Storage Area Along G Street	Step out for dioxins at SL-024-SA5A; location also characterizes area downslope from open storage area identified as "Waste Disposal Area" in EPA HSA. Shallow bedrock anticipated based on previous sampling in the area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-775-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-776	Open Storage Area Along G Street	Step out for PAHs, dioxins, and pesticides at SL-031-SA5A and dioxins and PAHs (Benzo-a-pyrene) at SL-026-SA5A; location also characterizes western portion of open storage area identified as "Waste Disposal Area" in EPA HSA and potential staining or low spot observed in aerial photographs between 1967 and 1972. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	6.9	0-5.0 ft bgs: fill described as 10% asphalt. Refusal on bedrock.	6/10/2013	Surface	SL-776-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
					6/10/2013	Subsurface (Duplicate)	SL-1176-SA5A-SB-6.0-7.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/10/2013	Subsurface	SL-776-SA5A-SB-6.0-7.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-777	Open Storage Area Along G Street	Location targets open storage area identified as "Waste Disposal Area" in EPA HSA; location also serves as step out for dioxins at SL-040-SA5A, and dioxins and pesticides at SL-037-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.3	None indicated. Refusal on bedrock.	6/10/2013	Surface	SL-777-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-778	Open Storage Area Along G Street	Collect sample at SL-036-SA5A to confirm previous perchlorate detection at 0.5 ft. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.9	0-1.2 ft bgs: fill described at 5% igneous gravel. Refusal on bedrock.	6/12/2013	Surface	SL-778-SA5A-SB-0.0-0.5	Perchlorate Confirmation EPA 6850/6860
					6/12/2013	Surface (Duplicate)	SL-1178-SA5A-SB-0.0-0.5	Perchlorate Confirmation EPA 6850/6860
					6/12/2013	Subsurface	SL-778-SA5A-SB-4.0-5.0	Perchlorate Confirmation EPA 6850/6860
5A_DG-779	East of Open Storage Area Along G Street	Step out for dioxins at SL-040-SA5A and SL-051-SA5A, and dioxins and pesticides at SL-037-SA5A; location also characterizes eastern extent of open storage area identified as "Waste Disposal Area" in EPA HSA and open field near former dirt road (observed in aerial photographs in 1957 and 1995). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.2	None indicated. Refusal on bedrock.	6/10/2013	Surface	SL-779-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, Pesticides EPA 8081, TPH-EFH EPA 8015, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-780	East of Open Storage Area Along G Street	Step out for dioxins at SL-051-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4	0-0.5 ft bgs: fill described as trace (1%) igneous gravel. Refusal on bedrock.	6/17/2013	Surface	SL-780-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/17/2013	Subsurface	SL-780-SA5A-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/17/2013	Subsurface (Duplicate)	SL-1180-SA5A-SB-3.0-4.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-781	South of Open Storage Area Along G Street	Step out for dioxins at SL-050-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3	2-3 ft bgs: fill described as no fill material present, but the material appears to be reworked. Refusal on bedrock.	6/12/2013	Surface	SL-781-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/12/2013	Subsurface	SL-781-SA5A-SB-2.0-3.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-782	South of Open Storage Area Along G Street	One of three locations targeting rill along dirt road downslope from open storage area identified as "Waste Disposal Area" in EPA HSA. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.5	0-0.5 ft bgs: fill described as 5% concrete gravel and clay sewer pipe. Refusal on bedrock.	6/12/2013	Surface	SL-782-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/12/2013	Subsurface	SL-782-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-783	South of Open Storage Area Along G Street	Step out for dioxins at SL-021-SA5A and SL-022-SA5A; location also characterizes former road and area of cleared vegetation (observed in 1959 aerial photo). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-783-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					6/11/2013	Surface (Duplicate)	SL-1183-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
5A_DG-784	Southeast of Open Storage Area South of G Street	One of three locations targeting rill along dirt road downslope from open storage area identified as "Waste Disposal Area" in EPA HSA. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.4	None indicated. Refusal on bedrock.	6/12/2013	Surface	SL-784-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/12/2013	Subsurface	SL-784-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-785	South of Open Storage Area Along G Street	Step out for dioxins at SL-021-SA5A and SL-022-SA5A; location also characterizes former road and area of cleared vegetation (observed in 1959 aerial photograph). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.3	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-785-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-786	Southwest of Open Storage Area Along G Street	Step out for dioxins at SL-024-SA5A; location also characterizes area downslope from open storage area identified as "Waste Disposal Area" in EPA HSA. Shallow bedrock anticipated based on previous sampling in the area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.9	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-786-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-787	South of Open Storage Area Along G Street	Location targets area of cleared vegetation and potential dirt road observed in aerial photographs between 1959 and 1965. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	9.2	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-787-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-788	Northeast of Clearly Contaminated Area (17th Street Pond)	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-788-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-789	Northeast of Clearly Contaminated Area (17th Street Pond)	Same as 5A_DG-788. Location along sanitary sewer pipeline near manhole to assess potential northeast extension of the 17th Street Pond Clearly Contaminated Area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	6	None indicated. Refusal on bedrock.	6/11/2013	Surface	SL-789-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, pH EPA 9045
					6/11/2013	Subsurface	SL-789-SA5A-SB-5.0-6.0	Dioxins EPA 1613, Formaldehyde EPA 8315, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, Hexavalent Chromium EPA 7196/7199, TPH-GRO EPA 8015
5A_DG-790	Northeast of Clearly Contaminated Area (17th Street Pond)	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.9	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-790-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-791	Northeast of Clearly Contaminated Area (17th Street Pond)	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.9	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-791-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-792	Northeast of Clearly Contaminated Area (17th Street Pond)	Step out for dioxins and metals (Silver) at SL-206-SA5B and SL-207-SA5B; location also defines eastern extent of Clearly Contaminated Area (17th Street Pond) in Subarea 5B. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.8	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-792-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-793	Northeast of Clearly Contaminated Area (17th Street Pond)	Step out to characterize Clearly Contaminated Area (17th Street Pond); location also targets area of cleared vegetation (observed only in 1959 aerial photograph). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.3	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-793-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-794	Northwest of Clearly Contaminated Area (Eastern Hummocky Area)	Step out to characterize area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond); location also placed on historical dirt road. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	ESA					
5A_DG-795	Northwest of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at CFBS1030 and dioxins and metals (Ag) at SL-207-SA5B; location also defines eastern extent of the 17th Street Pond Clearly Contaminated Area and characterizes area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	1.9	None indicated. Refusal on bedrock.	6/13/2013	Surface	SL-795-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-796	West of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at CFBS1030; location also characterizes area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	ESA					
5A_DG-797	West of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at SL-272-SA5B and CFBS1030; location also characterizes area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.						
5A_DG-798	West of Clearly Contaminated Area (Eastern Hummocky Area)	Step out to characterize area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.						

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-799 5A_DG-800 5A_DG-801 5A_DG-802 5A_DG-803 5A_DG-804	Southwest of Clearly Contaminated Area (Eastern Hummocky Area)	Location characterizes identified hummocky area adjacent to Clearly Contaminated Area (Eastern Hummocky Area) observed during site walk (May, 2012). Excavate exploratory trench to investigate hummocky area for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).	TRENCH					
5A_DG-807	Clearly Contaminated Area (Eastern Hummocky Area)	Location targets Clearly Contaminated Area (Eastern Hummocky Area) to complete coverage / definition within extent. Excavate exploratory trench to investigate hummocky area for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).						
5A_DG-808	Northwest of Clearly Contaminated Area (Eastern Hummocky Area)	Step out to characterize northern extent of Clearly Contaminated Area (Eastern Hummocky Area); location also characterizes identified hummocky area observed during site walk (May, 2012). Excavate exploratory trench to investigate hummocky area for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).						
5A_DG-809	North of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at SL-041-SA5A and CFBS1029; location also characterizes area between two Clearly Contaminated Areas (Eastern Hummocky Area and 17th Street Pond). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	ESA					
5A_DG-810	Northwest of Clearly Contaminated Area (Eastern Hummocky Area)	Same as 5AS_DG-332; also serves as a step out for PCBs and metals (Ag) at P2TS59.	TRENCH					

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-811	North of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at SL-041-SA5A and CFBS1029; location also targets edge of hummocky area observed during site walk (May, 2012) and characterizes northern extent of Clearly Contaminated Area (Eastern Hummocky Area). If pond dredge material / sediments observed in boring, collect one sample in sediment, one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).	6.9	None indicated. Refusal on bedrock.	6/5/2013	Surface	SL-811-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					6/5/2013	Subsurface	SL-811-SA5A-SB-5.5-6.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-812	Northeast of Clearly Contaminated Area (Eastern Hummocky Area)	Same as 5AS_DG-332; also serves as step out for dioxins at SL-049-SA5A. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	TRENCH					
5A_DG-813	North of Clearly Contaminated Area (Eastern Hummocky Area)	Representative location in open field. Hold deeper sample pending shallow results. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.8	None indicated. Refusal on bedrock.	6/5/2013	Surface	SL-813-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-814	Northeast of Clearly Contaminated Area (Eastern Hummocky Area)	Step out for dioxins at SL-049-SA5A; location also targets surface water pathway along dirt road. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location along surface water pathway.	5.4	None indicated. Refusal on bedrock.	6/5/2013	Surface	SL-814-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/5/2013	Subsurface	SL-814-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-815	East of Clearly Contaminated Area (Eastern Hummocky Area)	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.8	None indicated. Refusal on bedrock.	6/5/2013	Surface	SL-815-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-816	East of Clearly Contaminated Area (Eastern Hummocky Area)	Location targets potential hummocky area and defines eastern extent of Clearly Contaminated Area (Eastern Hummocky Area). If pond dredge material / sediments observed in boring, collect one sample in sediment, one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).	ESA					

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-817	East of Clearly Contaminated Area (Eastern Hummocky Area)	Targets small mound observed during site walk (May, 2012). Excavate exploratory trench to investigate mound for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).	Trench					
5A_DG-818	East of Clearly Contaminated Area (Eastern Hummocky Area)	Targets area of low-profile mounded soil observed during site walk (May, 2012). Excavate exploratory trench to investigate mound for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).						
5A_DG-819	East of Clearly Contaminated Area (Eastern Hummocky Area)	One of three locations targeting rill along dirt road downslope from open storage area identified as "Waste Disposal Area" in EPA HSA. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths.	7.7	None indicated. Refusal on bedrock.	5/30/2013	Surface	SL-819-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/30/2013	Subsurface	SL-819-SA5A-SB-6.5-7.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-820	Northeast of Clearly Contaminated Area (Eastern Hummocky Area)	Targets area of low-profile mounded soil observed during site walk (May, 2012). Excavate exploratory trench to investigate mound for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).	Trench					
5A_DG-821	Northeast of Clearly Contaminated Area (Eastern Hummocky Area)	Targets hummocky area observed during site walk (May, 2012). Excavate exploratory trench to investigate hummocky area for potential pond dredge sediment and log depth of native soil. Collect one sample in sediment (if observed), one sample in native soil just below contact with sediment, and deepest sample just above bedrock (bedrock anticipated between 5 ft and 10 ft bgs).						

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-822	Northeast of Open Storage Area Along G Street	Representative location in open field. Hold deeper sample pending shallower results. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.2	None indicated. Refusal on bedrock.	6/17/2013	Surface	SL-822-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-823	East of Open Storage Area Along G Street	Representative location in open field; location also positioned adjacent to historical dirt road observed in aerial photographs (1957 - 1965). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	10.9	None indicated. Refusal on bedrock.	6/17/2013	Surface	SL-823-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-824	Northwest of SE Drum Yard	Same as 5A_DG-823.	7.3	None indicated. Refusal on bedrock.	6/17/2013	Surface	SL-824-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-825	West of SE Drum Yard	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	16	None indicated. Refusal on bedrock.	6/17/2013	Surface	SL-825-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-826	West of SE Drum Yard	Targets shallow drainage pathway in open field. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location within surface water pathway.	14.8	None indicated. Refusal on bedrock.	6/12/2013	Surface	SL-826-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/12/2013	Subsurface	SL-826-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/12/2013	Subsurface	SL-826-SA5A-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/12/2013	Subsurface	SL-826-SA5A-SB-14.0-15.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-827	West of SE Drum Yard	Representative location in open field; location also placed on historical dirt road observed in aerial photograph (2005). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.9	None indicated. Refusal on bedrock.	6/7/2013	Surface	SL-827-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-828	Drainage Southwest of SE Drum Yard	Transect/step out for dioxins at SL-241-SA5A to characterize overbank deposits. Four lateral step out locations comprise a drainage transect (with previous drainage sample in the middle); collect step outs 5 feet and 10 feet laterally from location SL-241-SA5A/5A_DG-830. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths to assess historical deposition over time. 5A_DG-830 also serves as a step down for dioxins at SL-241-SA5A (previously, only 0.5 ft sample collected). Analyze shallow sample for TPH since not previously sampled. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths since located in unlined surface water pathway.	1.2	None indicated. Refusal on bedrock.	5/28/2013	Surface	SL-828-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-829	Drainage Southwest of SE Drum Yard		2.2	None indicated. Refusal on bedrock.	5/28/2013	Surface	SL-829-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-830	Drainage Southwest of SE Drum Yard		3.75	0-3.75 ft bgs: fill described as 5% metal, glass and wood. Refusal on bedrock.	5/28/2013	Surface	SL-830-SA5A-SB-0.0-0.5	TPH-EFH EPA 8015
					5/28/2013	Subsurface	SL-830-SA5A-SB-2.75-3.75	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-831	Drainage Southwest of SE Drum Yard		5.7	None indicated. Refusal on bedrock.	5/29/2013	Surface	SL-831-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/29/2013	Subsurface	SL-831-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-832	Drainage Southwest of SE Drum Yard		8.8	0-0.5 ft bgs: fill described as trace (1%) lime rock gravel. Refusal on bedrock.	5/29/2013	Surface	SL-832-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/29/2013	Subsurface	SL-832-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					5/29/2013	Subsurface	SL-832-SA5A-SB-7.2-8.2	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-833	Drainage Southwest of SE Drum Yard	Transect/step out for dioxins at SL-100-SA5A to characterize overbank deposits. Four lateral step out locations comprise a drainage transect (with previous drainage sample in the middle); collect step outs 5 feet and 10 feet laterally from location SL-100-SA5A/5A_DG-835. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths to assess historical deposition over time. 5A_DG-835 also serves as a step down for dioxins at SL-100-SA5A (previously, only 0.5 ft sample collected). Analyze shallow sample for TPH since not previously sampled. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location within unlined surface water pathway.	3.6	None indicated. Refusal on bedrock.	5/30/2013	Surface	SL-833-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/30/2013	Subsurface	SL-833-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-834	Drainage Southwest of SE Drum Yard		3.4	None indicated. Refusal on bedrock.	5/30/2013	Surface	SL-834-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/30/2013	Subsurface	SL-834-SA5A-SB-2.4-3.4	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-835	Drainage Southwest of SE Drum Yard		1.1	0-1.1 ft bgs: fill described as 5% asphalt and concrete gravel. Refusal on bedrock.	5/30/2013	Surface	SL-835-SA5A-SB-0.0-0.5	TPH-EFH EPA 8015
5A_DG-836	Drainage Southwest of SE Drum Yard		3.5	None indicated. Refusal on bedrock.	5/30/2013	Surface	SL-836-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/30/2013	Subsurface	SL-836-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-837	Drainage Southwest of SE Drum Yard		5.7	None indicated. Refusal on bedrock.	5/30/2013	Surface	SL-837-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/30/2013	Subsurface	SL-837-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
					5/30/2013	Subsurface (Duplicate)	SL-1237-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-838	Northeast of Clearly Contaminated Area (Eastern Hummocky Area)	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.3	None indicated. Refusal on bedrock.	5/31/2013	Surface	SL-838-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					5/31/2013	Surface (Duplicate)	SL-1238-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-839	Southwest of SE Drum Yard	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.4	None indicated. Refusal on bedrock.	5/31/2013	Surface	SL-839-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-840	East of Clearly Contaminated Area (Eastern Hummocky Area)	Representative location in open field; location also positioned on historical dirt road (observed in aerial photographs in 1967 and between 1977 and 1990). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.4	None indicated. Refusal on bedrock.	5/31/2013	Surface	SL-840-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-841	South of SE Drum Yard	Representative location in open field; location also targets low spot/drainage pathway from northeast (near 5AS_DG-386) and positioned on historical dirt road (observed in aerial photographs between 1953 and 1977). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.7	None indicated. Refusal on bedrock.	5/31/2013	Surface	SL-841-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-842	South of SE Drum Yard	Representative location in open area; also targets area of cleared vegetation observed in 1980 aerial photograph. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	11.9	None indicated. Refusal on bedrock.	5/29/2013	Surface	SL-842-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-843	Southeast of SE Drum Yard	Recollect at SEBS1002 located within area of cleared vegetation east of the SE Drum Yard and analyze for dioxins to complete the analytical suite. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	11	None indicated. Refusal on bedrock.	5/29/2013	Surface	SL-843-SA5A-SB-0.0-0.5	Dioxins EPA 1613
5A_DG-844	South of SE Drum Yard	Location targets rilling along dirt road and provides dioxin data near/upslope of elevated dioxins in drainage sample location SL-098-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths since located in unlined surface water pathway.	6.7	None indicated. Refusal on bedrock.	5/29/2013	Surface	SL-844-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-845	East of SE Drum Yard	Recollect at SEBS1001 located within area of cleared vegetation east of the SE Drum Yard and analyze for dioxins to complete the analytical suite. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.5	None indicated. Refusal on bedrock.	6/7/2013	Surface	SL-845-SA5A-SB-0.0-0.5	Dioxins EPA 1613
5A_DG-846	East of SE Drum Yard	Step out for PAHs (Benzo-a-pyrene) at SEBS1000; location also characterizes eastern SE Drum Yard storage area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.5	None indicated. Refusal on bedrock.	6/7/2013	Surface	SL-846-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-847	SE Drum Yard	One of three samples characterizing the northern portion of the SE Drum Yard (previous historical [1988] samples had elevated RLs for NDMA and PAHs) but were not analyzed for comprehensive suite; location also serves as step out for PAHs (Benzo-a-pyrene) at SEBS1000 and targets containers / cleared vegetation (observed in aerial photographs between 1960 and 1965). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.4	None indicated. Refusal on bedrock.	6/7/2013	Surface	SL-847-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-848	SE Drum Yard	One of three samples characterizing the northern portion of the SE Drum Yard (previous historical [1988] samples had elevated RLs for NDMA and PAHs) but were not analyzed for comprehensive suite; location also serves as step out for PAHs (Benzo-a-pyrene) at SEBS1000 and targets containers / cleared vegetation (observed in aerial photographs between 1960 and 1965). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	9	None indicated. Refusal on bedrock.	6/7/2013	Surface	SL-848-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-849	SE Drum Yard	One of three samples characterizing the northern portion of the SE Drum Yard (previous historical [1988] samples had elevated RLs for NDMA and PAHs) but were not analyzed for comprehensive suite. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; hold deeper sample pending shallower results.	4.7	None indicated. Refusal on bedrock.	7/29/2013	Surface	SL-849-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-850	South of B4029	Characterizes potential surface water pathway along dirt road south of B4029. Locate drainage feature (e.g. rill, topographic low, etc.) if identifiable; otherwise collect at GPS coordinates shown on figure to characterize open field area. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given area receives surface water runoff.	5.8	None indicated. Refusal on bedrock.	6/14/2013	Surface	SL-850-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-851	Drainage Southwest of B4029	Location targets area of potential sheet flow between two parallel drainages southwest of B4029 (observed in aerial photographs between 1978 and 1988). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5.3	None indicated. Refusal on bedrock.	7/29/2013	Surface	SL-851-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-852	Drainages Southwest of B4029	Location targets one of two drainages southwest of B4029; analyze PCBs since drainage potentially receives runoff from operational areas to the north of G Street. Locate drainage feature (e.g. rill, topographic low, etc.) and map with GPS prior to collection of samples. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths since located in surface water pathway.	5.6	None indicated. Refusal on bedrock.	6/14/2013	Surface	SL-852-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					6/14/2013	Surface (Duplicate)	SL-1252-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					6/14/2013	Subsurface	SL-852-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-853	Drainage Southwest of B4029	Same as 5A_DG-852.	4.5	None indicated. Refusal on bedrock.	7/29/2013	Surface	SL-853-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					7/29/2013	Subsurface	SL-853-SA5A-SB-3.5-4.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-854	West of B4029	Stepout for surficial dioxins detected at SL-053-SA5A; location also positioned adjacent to historical dirt road observed in aerial photographs (1957 - 1965). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze 5-foot sample since dioxins RLs were >ISLs at SL-053-SA5A.	5.3	None indicated. Refusal on bedrock.	6/18/2013	Surface	SL-854-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/18/2013	Subsurface	SL-854-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-855	West of B4029	Same as 5A_DG-854; location also positioned on historical dirt road observed in aerial photographs (1957 and 1959). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	7.4	None indicated. Refusal on bedrock.	6/18/2013	Surface	SL-855-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-856	Northwest of B4029 Near G Street	Stepout for PAHs, dioxins, and metals (Lead, Zinc) at SL-096-SA5A; location also downslope of culvert discharge at SL-096-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	ESA					
5A_DG-857	Northwest of B4029 Near G Street	Same as 5A_DG-856.						
5A_DG-858	Northwest of B4029 Near G Street	Stepdown for dioxins and PAHs at SL-096-SA5A; location also targets culvert discharge point. Analyze shallow sample for TPH since not previously sampled. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location at culvert discharge point.	1.8	0-0.5 ft bgs: fill described as trace (1%) concrete and plastic. Refusal on bedrock.	6/5/2013	Surface	SL-858-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-859	Northwest of B4029 Near G Street	Stepout for PAHs, dioxins, and metals (Lead, Zinc) at SL-096-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.8	None indicated. Refusal on bedrock.	6/19/2013	Surface	SL-859-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-860	West of B4029 Access Road	Characterizes potential surface water pathway in vegetated area south of G Street. Target drainage feature (e.g. rill, topographic low, etc.) if identifiable; otherwise collect at GPS coordinates shown on figure to characterize open field area. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given area receives surface water runoff.	11.9	None indicated. Refusal on bedrock.	6/18/2013	Surface	SL-860-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/18/2013	Subsurface	SL-860-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/18/2013	Subsurface	SL-860-SA5A-SB-10.5-11.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-861	North of B4029	Location targets discharge from culvert which receives runoff from B4064 operational areas in the north (located in Subarea 6) and unlined surface water pathway along south side of G Street. Shallow bedrock anticipated. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location at surface water discharge point.	8.2	0-1.2 ft bgs: fill described as trace (1%) concrete gravel. Refusal on bedrock.	6/5/2013	Surface	SL-861-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, TPH-EFH EPA 8015, pH EPA 9045
					6/5/2013	Subsurface	SL-861-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/5/2013	Subsurface	SL-861-SA5A-SB-7.0-8.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, PCBs/PCTs EPA 8082, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-862	North of B4029 Access Road	Stepout upstream of culvert inlet in unlined surface water pathway for dioxins at SL-095-SA5A. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location within unlined drainage.	5.6	None indicated. Refusal on bedrock.	6/6/2013	Surface	SL-862-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/6/2013	Subsurface	SL-862-SA5A-SB-4.5-5.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-863	Southwest of B4029 Access Road	Targets discharge from existing culvert downslope of B4029 access road. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location at culvert discharge point.	4.8	0-0.5 ft bgs: fill described as 10% asphalt and granite gravel. Refusal on bedrock.	6/19/2013	Surface	SL-863-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/19/2013	Subsurface	SL-863-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-864	Southwest of B4029 Access Road	Targets discharge from two historical culverts downslope of B4029 access road. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths given location at culvert discharge point.	4.8	0-0.5 ft bgs: fill described as trace (1%) aluminum and asphalt. Refusal on bedrock.	6/18/2013	Surface	SL-864-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/18/2013	Subsurface	SL-864-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-865	B4029 Access Road	Stepout for dioxins at SL-056-SA5A and dioxins and PAHs at SL-057-SA5A; also characterizes possible fill along slope and area of cleared vegetation south of B4029 access road (observed in aerial photographs from 1980 and 1995) and identified in EPA's HSA 5A Tech Memo as "ground scar". Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	9.9	0-2 ft bgs: fill described as trace (1%) asphalt and igneous gravel. Refusal on bedrock.	6/19/2013	Surface	SL-865-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/19/2013	Subsurface	SL-865-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
					6/19/2013	Subsurface	SL-865-SA5A-SB-9.0-10.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-866	South of B4029 Access Road	Stepout for TPH at SFBS0012 and PAHs and dioxins at SL-057-SA5A; also characterizes possible fill along slope and area of cleared vegetation south of the B4029 access road (observed only in aerial photographs from 1980 and 1995) and identified in EPA's HSA 5A Tech Memo as "ground scar". Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths since TPH detected at depth in previous samples and to characterize fill.	6.4	0-1.6 ft bgs: fill described at trace (1%) granite gravel. Refusal on bedrock.	6/19/2013	Surface	SL-866-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/19/2013	Subsurface	SL-866-SA5A-SB-5.5-6.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015, Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015
5A_DG-867	South of B4029 Access Road	Stepout for TPH at SFBS0011 and SFBS0012; also characterizes possible fill along slope and area of cleared vegetation south of the B4029 access road (observed only in aerial photographs from 1980 and 1995) and identified in EPA's HSA 5A Tech Memo as "ground scar". Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock; analyze all depths since TPH detected at depth in previous samples and to characterize fill.	4.5	0-0.5 ft bgs: fill described as trace (1%) siltstone gravel. Refusal on bedrock.	6/20/2013	Surface	SL-867-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/20/2013	Subsurface	SL-867-SA5A-SB-3.5-4.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-868	South of B4029 Access Road	Location targets potential surface water feature on slope south of B4029 (linear feature observed in 1980 aerial photograph); location also characterizes possible fill along slope and area of cleared vegetation south of the B4029 access road (observed only in aerial photographs from 1980 and 1995) and identified in EPA HSA as "ground scar". Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.9	0-1.6 ft bgs: fill described as <5% asphalt, siltstone and sandstone gravel. Refusal on bedrock.	6/20/2013	Surface	SL-868-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/20/2013	Subsurface	SL-868-SA5A-SB-4.0-5.0	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045, TPH-GRO EPA 8015
5A_DG-869	South of B4029	Location targets historical dirt road leading to cleared vegetation area on slope south of B4029 (observed in 1980 aerial photograph). Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	3.4	None indicated. Refusal on bedrock.	6/14/2013	Surface	SL-869-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

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

Location ID	Location Description	Rationale / Comments	Boring Total Depth (ft bgs)	Fill Description	Sample Date	Sample Type	Sample Number	Laboratory Analyses
5A_DG-870	South of B4029	Same as 5A_DG-869.	3	None indicated. Refusal on bedrock.	6/14/2013	Surface	SL-870-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-871	East of B4029	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	5	None indicated. Refusal on bedrock.	6/6/2013	Surface	SL-871-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/6/2013	Surface (Duplicate)	SL-1271-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
5A_DG-872	East of B4029	Representative location in open field. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	4.6	2-3.5 ft bgs: fill described as trace (1%) woody material. Refusal on bedrock.	6/6/2013	Surface	SL-872-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045
					6/6/2013	Subsurface	SL-872-SA5A-SB-2.5-3.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, pH EPA 9045, TPH-EFH EPA 8015, TPH-GRO EPA 8015
5A_DG-873	North of B4029	Location targets dirt road south of G Street and upslope from elevated detections (L4BS1014) in Subarea 6. Collect samples at 5 ft intervals to bedrock with deepest sample just above bedrock.	2.9	None indicated. Refusal on bedrock.	6/6/2013	Surface	SL-873-SA5A-SB-0.0-0.5	Dioxins EPA 1613, Mercury EPA 7471, Metals EPA 6010, Metals EPA 6020, PAH EPA 8270 SIM, TPH-EFH EPA 8015, pH EPA 9045

Notes & Abbreviations:
Note: The sample number for a "duplicate sample" was increased by 300 (e.g. SB-530 and SB-830)
AST = Above-ground Storage Tank
bgs = below ground surface
Cr (VI) = hexavalent chromium
EFH = extractable fuel hydrocarbons
EPA = Environmental Protection Agency
ESA = Environmentally Sensitive Area
ft = feet
GPS = Global Positioning System
GRO = gasoline range organics
HSA = Historical Site Assessment
ID = identifier
ISF = interim storage facility
ISL = interim screening level
ND = nondetect
NDMA = n-Nitrosodimethylamine
PAH = polyaromatic hydrocarbon
PCB = polychlorinated biphenyl
PCT = polychlorinated triphenyl
PID = photoionization detector
RFI = Facility Investigation Reports
RL = reporting limit
RMHF = Radioactive Material Handling Facility
SIM = selective ion monitoring
SNAP = Streamlined New Acquisition Process
SRE = Sodium Reactor Experiment
TPH = total petroleum hydrocarbons
< = less than

2.1 Surface Sampling

Prior to the collection of the surface soil samples in Subarea 5A, the surface of each sample area was prepared by removing leaves, grass, and any other surface debris. Thirty-four surface samples were collected at 32 locations in Subarea 5A from the ground surface to 6 inches bgs using a slide hammer equipped with a 2-inch diameter and 6-inch long stainless steel sample liner in accordance with SSFL SOP 2 (Surface Soil Sampling) of the Master FSP (CDM Smith 2012a). The slide hammer sampler was pounded into the soil until the top of the sampler was flush with the ground surface. The sampler was then removed from the soil. The sample sleeve was removed from the sampler and both ends capped with a Teflon® liner and a plastic cap.

Ninety surface samples were collected at 82 locations in Subarea 5A using a direct push technology (DPT) rig in accordance with SSFL SOP 4 (DPT Sampling) of the Master FSP (CDM Smith 2012a). Stainless steel sleeves measuring 5 ¾ inches by 1 ¾ inches were inserted into the DPT split spoon sampler and pushed to the required sample interval. Upon removal from the DPT sampler, each liner was capped on both ends with a Teflon® liner and plastic cap.

After the samples were collected and labeled "Top" and "Bottom," adhesive sample labels, completed with all sampling information, were affixed to all sample sleeves and jars, which were then placed into plastic zip top bags and stored in a cooler with double bagged ice until the samples were relinquished to the project sample coordinator or field team leader (FTL). Each surface sample was to be analyzed for the methods identified for each sample location as indicated in Table 1 of the Subarea 5A Data Gap Analysis TM (CDM Smith 2012b).

2.2 Subsurface Sampling

Collection of subsurface soil samples at most locations in Subarea 5A was performed in accordance with SSFL SOP 3 (Subsurface Soil Sampling with Hang Auger) of the Master FSP (CDM Smith 2012a) using a hand auger and slide hammer equipped with stainless steel sleeves. Thirteen subsurface samples were collected from 11 locations in Subarea 5A via hand auger and slide hammer.

Each location was augered to the required sample depth and every foot of augered soil was retrieved to the surface, placed in plastic bags and screened using the Micro R, Pancake, and PID. Any EnCore® samplers needed were filled from the bottom end of the stainless steel sleeve inside the slide hammer and the sleeve was capped and submitted for the required analyses. This process was repeated at those locations where deeper soils were encountered.

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

Collection of subsurface soil samples at easily accessible locations in Subarea 5A was performed by a California-licensed DPT subcontractor under CDM Smith oversight and in accordance with SSFL SOP 4 (DPT Sampling) of the Master FSP (CDM Smith 2012a). Sixty-three subsurface samples were collected from 39 locations in Subarea 5A using DPT. Soil cores were collected using the DPT dual-tube sampling method, which consists of a 2-inch outer steel drive casing and an inner 1¾-inch diameter acetate soil sampling sleeve. After the liner was retracted from the core barrel, it was opened lengthwise with a cutting tool. Samples were collected from the acetate sleeve at the depths specified in Table 1 of the Subarea 5A and NBZ Data Gap Analysis TM. Samples were also collected from any

depths where the PID detected concentrations above background or where there was visual evidence of possible contamination.

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

2.3 Sample Handling

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

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

2.4 Field Quality Control Procedures

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

2.4.1 Field Duplicates and MS/MSD Samples

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

During sampling in Subarea 5A, a total of 16 field duplicate/MS/MSD samples were collected equating to approximately eight percent. On an individual method basis, the five percent goal was exceeded for all analyses.

2.4.2 Equipment Rinsate Blank Samples

Equipment rinsate blanks were collected weekly for both surface and subsurface soil samples regardless of the number of soil samples collected.

2.4.3 Field Blank Samples

Field blanks were collected once for each lot number of ASTM International (ASTM) Type II water that was used for decontamination. Two field blanks was collected during Phase 3 sampling in Subarea 5A. Other field blanks are associated with samples in Subarea 5A but were collected prior to the sampling conducted in these subareas.

2.4.4 Decontamination of Sampling Equipment

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

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

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

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

2.5 Analytical Laboratory Methods and Procedures

2.5.1 Analytical Methods

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

- Metals using U.S. Environmental Protection Agency (EPA) Methods 6010C/6020A, 7471B (mercury), and 7199 (chromium VI)
- Soil pH using EPA Method 9045M
- PAHs using EPA Method 8270D selective ion monitoring (SIM)

- Volatile organic compounds (VOCs) using EPA Method 8260
- 1,4-Dioxane using EPA Method 8260 SIM
- Perchlorate using EPA Method 6850
- Pesticides using EPA Method 8081B
- Herbicides using EPA Method 8151A
- PCBs/PCTs using EPA Method 8082A
- Dioxins/furans using EPA Method 1613B
- Formaldehyde using EPA Method 8315A
- Terphenyls using EPA Method 8015B
- Alcohols using EPA Method 8015C
- TPH-EFH using EPA Method 8015M
- TPH-GRO using EPA Method 8015M

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

2.6 Data Review Processes

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

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

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

- Laboratory consultation with the project chemists on data quality issues during sample analyses such as missed holding times, poor spike recoveries, etc. These issues are discussed between the project chemists and the laboratory and are resolved based on technical merit and determined if usable in the evaluation.

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

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

- Review of the laboratory case narratives. The case narrative identifies and explains quality issues encountered during the analysis of the samples. Quality issues may include (but are not

limited to) expired holding times, poor spike recoveries in matrix or batch-specific QC samples, instrument calibration exceedances, and blank contamination.

- Review of the laboratory-specific QC data. These data are provided by the laboratory in summary form. Any unanticipated deviations from the project or method-specific criteria are reconciled with the laboratory at this stage.

2.7 Deviations from the Master FSP

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

2.7.1 Field Sampling

The SSFL SOP 2 (Surface Soil Sampling) requires soil to be collected in decontaminated stainless steel sleeves during soil sample collection by slide hammer. Due to loose, sandy soil conditions that prevented soil from remaining within the stainless steel sleeve, six samples in Subarea 5A were collected using a clean slide hammer and placed directly into glass jars. The sample numbers are as follows:

SL-861-SA5A-SB-4.0-5.0
SL-861-SA5A-SB-7.0-8.0
SL-862-SA5A-SB-4.5-5.5
SL-789-SA5A-SB-5.0-6.0
SL-866-SA5A-SB-5.5-6.5
SL-863-SA5A-SB-4.0-5.0

2.7.2 Analytical

No analytical deviations were encountered during analyses of samples collected for Phase 3 in Subarea 5A.

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Section 3

Subarea 5A Phase 3 Soil Sample Analytical Results

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

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

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Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
Alcohols	2-Propanol	67-63-0	0 / 1	-	-	200 - 200	1000 - 1000	µg/kg	-	-	-	-
Alcohols	Ethanol	64-17-5	0 / 1	-	-	200 - 200	1000 - 1000	µg/kg	-	-	-	-
Alcohols	Methanol	67-56-1	1 / 1	480 J FD, Z, *#	480 J FD, Z, *#	200 - 200	1000 - 1000	µg/kg	5A_DG-628	LL	8015C	0 - 0.5
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	94 / 108	0.35 J Z	3820 J *#	0.0154 - 0.403	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	86 / 108	0.273 J Z	275	0.00629 - 0.138	4.81 - 5.63	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	49 / 108	0.0563 J Z	30.1	0.00976 - 0.192	4.81 - 5.63	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	72 / 108	0.018 J Z	44.9	0.0146 - 0.13	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	52 / 108	0.0594 J Z	15.2	0.0106 - 0.133	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	93 / 108	0.0747 J Z	144	0.0157 - 0.136	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	57 / 108	0.102 J Z	7.65	0.00897 - 0.138	4.81 - 5.63	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	89 / 108	0.245 J Z	105	0.0152 - 0.132	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	48 / 108	0.124 J Z	1.53 J Z	0.00986 - 0.147	4.81 - 5.63	ng/kg	5A_DG-673	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	49 / 108	0.0634 J Z	2.82 J Z	0.00886 - 0.0762	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	54 / 108	0.0589 J Z	22.8	0.0205 - 0.164	4.81 - 5.63	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	54 / 108	0.144 J Z	7.89	0.00875 - 0.129	4.81 - 5.63	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	43 / 108	0.0924 J Z	2.67 J Z	0.00864 - 0.0688	4.81 - 5.63	ng/kg	5A_DG-859	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	48 / 108	0.0246 J Z	2.23	0.0197 - 0.0951	0.963 - 1.13	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	65 / 108	0.0152 J Z	1.07	0.0126 - 0.143	0.963 - 1.13	ng/kg	5A_DG-859	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	103 / 108	1.25 J Z	101000 J *#	0.0168 - 0.239	9.63 - 11.3	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	85 / 108	0.852 J Z	1650	0.0185 - 0.133	9.63 - 11.3	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Formaldehyde	Formaldehyde	50-00-0	0 / 5	-	-	1200 - 12000	2000 - 20000	µg/kg	-	-	-	-
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 1	-	-	180 - 180	180 - 180	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	0 / 1	-	-	0.83 - 0.83	1.7 - 1.7	µg/kg	-	-	-	-
Herbicides	2,4-D	94-75-7	0 / 1	-	-	12 - 12	36 - 36	µg/kg	-	-	-	-
Herbicides	2,4-DB	94-82-6	0 / 1	-	-	6.3 - 6.3	17 - 17	µg/kg	-	-	-	-
Herbicides	Dicamba	1918-00-9	0 / 1	-	-	4 - 4	12 - 12	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 1	-	-	9.1 - 9.1	17 - 17	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 1	-	-	9.1 - 9.1	24 - 24	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 1	-	-	770 - 770	2500 - 2500	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 1	-	-	760 - 760	2500 - 2500	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 1	-	-	0.76 - 0.76	1.7 - 1.7	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	5 / 5	0.28 J Z	1.1 J FD	0.14 - 0.15	0.4 - 0.42	mg/kg	5A_DG-715	LL	7199	0 - 0.5
Mercury	Mercury	7439-97-6	66 / 106	0.01 J Z	0.288	0.0093 - 0.0112	0.0156 - 0.0187	mg/kg	5A_DG-719	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	106 / 106	7900	37300	7 - 8.64	38.8 - 44.8	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	10 / 106	0.529 J Q, Z	0.814 J Z	0.485 - 0.783	3.88 - 4.48	mg/kg	5A_DG-847	LL	6010C	0 - 0.5
Metals	Arsenic	7440-38-2	106 / 106	1.99 J Q, Z	11.4	0.32 - 0.741	3.88 - 4.48	mg/kg	5A_DG-521	LL	6010C	0 - 0.5
Metals	Barium	7440-39-3	106 / 106	54.8	137	0.032 - 0.037	0.969 - 1.12	mg/kg	5A_DG-781	LL	6010C	0 - 0.5
Metals	Beryllium	7440-41-7	106 / 106	0.31 J Z	1.42	0.0649 - 0.075	0.969 - 1.12	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Boron	7440-42-8	92 / 106	1.23 J Z	15.2	0.804 - 0.93	9.69 - 11.2	mg/kg	5A_DG-873	LL	6010C	0 - 0.5
Metals	Cadmium	7440-43-9	66 / 106	0.11 J Z	0.712 J Z	0.032 - 0.0805	0.969 - 1.12	mg/kg	5A_DG-783	LL	6010C	0 - 0.5
Metals	Calcium	7440-70-2	106 / 106	1580	13700	3.24 - 4.5	19.4 - 22.4	mg/kg	5A_DG-696	LL	6010C	0 - 0.5
Metals	Chromium	7440-47-3	106 / 106	12.2	34.8	0.0853 - 0.169	2.91 - 3.36	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Cobalt	7440-48-4	106 / 106	3.31	13.4	0.0872 - 0.105	0.969 - 1.12	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Copper	7440-50-8	101 / 106	0.571 J FD, Q, Z	18.8	0.174 - 1.8	1.94 - 20	mg/kg	5A_DG-616	LL	6010C	0 - 0.5
Metals	Iron	7439-89-6	106 / 106	14700	34300	3.51 - 20.2	38.8 - 212	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Lead	7439-92-1	106 / 106	4.59	69.6	0.456 - 0.529	2.91 - 3.36	mg/kg	5A_DG-861	LL	6010C	0 - 0.5
Metals	Lithium	7439-93-2	106 / 106	14.6	35.3	0.33 - 0.62	3.9 - 4.5	mg/kg	5A_DG-521	LL	6010C	0 - 0.5
Metals	Magnesium	7439-95-4	106 / 106	2870	6310	1.62 - 1.94	9.69 - 11.2	mg/kg	5A_DG-521	LL	6010C	0 - 0.5
Metals	Manganese	7439-96-5	106 / 106	139	520	0.0804 - 0.093	0.969 - 1.12	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Molybdenum	7439-98-7	1 / 106	1.26 J F	1.26 J F	0.165 - 0.19	1.94 - 2.24	mg/kg	5A_DG-713	LL	6010C	0 - 0.5
Metals	Nickel	7440-02-0	106 / 106	4.72	19.1	0.107 - 0.138	1.94 - 2.24	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Phosphorus	7723-14-0	106 / 106	150	687	0.494 - 3.06	9.69 - 11.2	mg/kg	5A_DG-616	LL	6010C	0 - 0.5
Metals	Potassium	7440-09-7	106 / 106	1440	4960	8.09 - 15.1	96.9 - 112	mg/kg	5A_DG-840	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	92 / 106	0.0998 J Z	0.537	0.0969 - 0.112	0.388 - 0.448	mg/kg	5A_DG-772	LL	6020A	0 - 0.5
Metals	Silver	7440-22-4	96 / 106	0.0251 J Z	13.6 J FD	0.0194 - 0.0275	0.194 - 0.224	mg/kg	5A_DG-715	LL	6020A	0 - 0.5
Metals	Sodium	7440-23-5	106 / 106	58.4 J Z	758	16.2 - 18.7	96.9 - 112	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Strontium	7440-24-6	106 / 106	11.8 J Q	53.8 J Q, A	0.033 - 0.072	0.388 - 0.448	mg/kg	5A_DG-696	LL	6020A	0 - 0.5
Metals	Thallium	7440-28-0	106 / 106	0.199 J Z	0.457	0.0291 - 0.0336	0.194 - 0.224	mg/kg	5A_DG-867	LL	6020A	0 - 0.5

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
Metals	Tin	7440-31-5	0 / 106	-	-	0.213 - 0.246	9.69 - 11.2	mg/kg	-	-	-	-
Metals	Titanium	7440-32-6	106 / 106	898	1580	0.165 - 0.19	0.969 - 1.12	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Vanadium	7440-62-2	106 / 106	24.5	67.7	0.107 - 0.138	0.969 - 1.12	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Zinc	7440-66-6	106 / 106	37.8	199	0.194 - 0.224	3.88 - 4.48	mg/kg	5A_DG-696	LL	6010C	0 - 0.5
Metals	Zirconium	7440-67-7	98 / 106	0.901 J Q, E, Z	4.62 J Z	0.804 - 0.93	4.85 - 5.6	mg/kg	5A_DG-873	LL	6010C	0 - 0.5
Moisture Content	Moisture	MOIST	115 / 115	0.58	13.7	0.1 - 0.1	0.1 - 0.1	%	5A_DG-836	LL	160.3M	0 - 0.5
PAHs	1-Methylnaphthalene	90-12-0	9 / 106	0.69 J Z	13 J Z	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-673 5A_DG-631	LL LL	8270D SIM 8270D SIM	0 - 0.5 0 - 0.5
PAHs	2-Methylnaphthalene	91-57-6	19 / 106	0.7 J Z	16	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-673	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthene	83-32-9	4 / 106	1.4 J Z	7.7	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthylene	208-96-8	6 / 106	0.4 J Z	1.5 J Z	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	23 / 106	0.39 J Z	18	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)anthracene	56-55-3	33 / 106	0.68 J Z	71	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-777	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	44 / 106	0.67 J Z	98	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	76 / 106	0.69 J Z	150	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	8 / 106	3.7 J FD, Q, Z	87	3.3 - 36	17 - 180	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(g,h,i)perylene	191-24-2	36 / 106	0.69 J Z	80	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	33 / 106	0.71 J Z	52	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	36 / 106	6.1 J Z	430	5.9 - 64	18 - 190	µg/kg	5A_DG-866	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	6 / 106	6.5 J Z	71	5.9 - 64	18 - 190	µg/kg	5A_DG-785	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	80 / 106	0.36 J Z	81	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Dibenzo(a,h)anthracene	53-70-3	10 / 106	0.71 J Z	20	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	0 / 106	-	-	5.9 - 64	18 - 190	µg/kg	-	-	-	-
PAHs	Dimethylphthalate	131-11-3	1 / 106	110	110	5.9 - 64	18 - 190	µg/kg	5A_DG-776	LL	8270D SIM	0 - 0.5
PAHs	Di-n-butylphthalate	84-74-2	1 / 106	45	45	5.9 - 64	18 - 190	µg/kg	5A_DG-521	LL	8270D SIM	0 - 0.5
PAHs	Di-n-octylphthalate	117-84-0	37 / 106	6.9 J Z	230	5.9 - 64	18 - 190	µg/kg	5A_DG-824	LL	8270D SIM	0 - 0.5
PAHs	Fluoranthene	206-44-0	66 / 106	0.78 J Z	110	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-859	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	3 / 106	0.75 J Z	5.8	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	18 / 106	0.71 J Z	90	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Morpholine	110-91-8	0 / 3	-	-	20 - 22	20 - 22	µg/kg				-
PAHs	Naphthalene	91-20-3	22 / 106	0.85 J Z	8.5	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-673	LL	8270D SIM	0 - 0.5
PAHs	N-Nitrosodimethylamine	62-75-9	1 / 106	0.72 J Z	0.72 J Z	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-596	LL	8270D SIM	0 - 0.5
PAHs	Phenanthrene	85-01-8	65 / 106	0.73 J Z	85	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Pyrene	129-00-0	67 / 106	0.74 J Z	100	0.66 - 7.1	1.7 - 18	µg/kg	5A_DG-864 5A_DG-777	LL LL	8270D SIM 8270D SIM	0 - 0.5 0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 47	-	-	3.3 - 3.5	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 47	-	-	5.1 - 5.4	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 47	-	-	4.1 - 4.4	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 47	-	-	4.1 - 4.4	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 47	-	-	3.3 - 3.5	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	3 / 47	9.4 J Z	45	4.4 - 4.7	17 - 18	µg/kg	5A_DG-788	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	0 / 47	-	-	3.9 - 4.1	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 47	-	-	3.3 - 3.5	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 47	-	-	3.3 - 3.5	17 - 18	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 47	-	-	10 - 11	33 - 35	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 47	-	-	10 - 11	33 - 35	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	5 / 47	14 J Z	29 J Z	10 - 11	33 - 35	µg/kg	5A_DG-521	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	0 / 1	-	-	2.2 - 2.2	5.1 - 5.1	µg/kg	-	-	-	-
Pesticides	4,4'-DDD	72-54-8	0 / 7	-	-	0.33 - 0.34	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	2 / 7	0.52 J Z	8 J FD, Q	0.33 - 1.4	1.7 - 1.8	µg/kg	5A_DG-708	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	3 / 7	0.82 J Z	11 J FD, Q	0.35 - 0.36	1.7 - 1.8	µg/kg	5A_DG-708	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 7	-	-	0.17 - 0.18	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Alpha-Bhc	319-84-6	0 / 7	-	-	0.17 - 0.18	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Beta-Bhc	319-85-7	0 / 7	-	-	0.97 - 0.99	1.9 - 2	µg/kg	-	-	-	-
Pesticides	Chlordane	57-74-9	0 / 7	-	-	4 - 4.1	17 - 18	µg/kg	-	-	-	-
Pesticides	Delta-Bhc	319-86-8	0 / 7	-	-	0.45 - 0.47	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	0 / 7	-	-	0.33 - 0.34	1.7 - 1.8	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
Pesticides	Endosulfan I	959-98-8	0 / 7	-	-	0.22 - 0.23	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 7	-	-	0.33 - 0.34	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 7	-	-	0.33 - 0.34	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 7	-	-	0.33 - 0.34	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	1 / 7	0.49 J Z	0.49 J Z	0.33 - 0.34	1.7 - 1.8	µg/kg	5A_DG-773	LL	8081B	0 - 0.5
Pesticides	Endrin Ketone	53494-70-5	0 / 7	-	-	0.61 - 0.62	1.8 - 1.9	µg/kg	-	-	-	-
Pesticides	Gamma-Bhc (Lindane)	58-89-9	0 / 7	-	-	0.17 - 0.18	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 7	-	-	0.17 - 0.18	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	0 / 7	-	-	0.17 - 0.18	0.84 - 0.86	µg/kg	-	-	-	-
Pesticides	Methoxychlor	72-43-5	0 / 7	-	-	1.7 - 1.8	6.8 - 6.9	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 7	-	-	0.35 - 0.36	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 7	-	-	14 - 15	33 - 34	µg/kg	-	-	-	-
pH	pH	pH	106 / 106	4.55	10.3	0.01 - 0.01	0.01 - 0.01	pH	5A_DG-719	LL	9045M	0 - 0.5
SVOC	1,1'-Biphenyl	92-52-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 1	-	-	300 - 300	670 - 670	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 1	-	-	7 - 7	33 - 33	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 1	-	-	100 - 100	340 - 340	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 1	-	-	68 - 68	170 - 170	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 1	-	-	170 - 170	510 - 510	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 1	-	-	68 - 68	170 - 170	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 1	-	-	170 - 170	510 - 510	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 1	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	Benzoic Acid	65-85-0	0 / 1	-	-	170 - 170	510 - 510	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 1	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Dibenzofuran	132-64-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Hexachlorobenzene	118-74-1	0 / 1	-	-	3 - 3	17 - 17	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 1	-	-	170 - 170	510 - 510	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
SVOC	Pentachlorophenol	87-86-5	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Phenol	108-95-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Pyridine	110-86-1	0 / 1	-	-	68 - 68	170 - 170	µg/kg	-	-	-	-
Terphenyls	m-Terphenyl	92-06-8	1 / 3	0.11 J Z	0.11 J Z	0.068 - 0.069	0.17 - 0.18	mg/kg	5A_DG-719	LL	8015B	0 - 0.5
Terphenyls	o-Terphenyl	84-15-1	0 / 3	-	-	0.068 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-
Terphenyls	p-Terphenyl	92-94-4	0 / 3	-	-	0.068 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 108	-	-	2 - 21	5 - 53	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	17 / 108	2 J Z	10 J Z	2 - 21	5 - 53	mg/kg	5A_DG-631	LL	8015M	0 - 0.5
TPH-EFH	EFH (C21-C30)	PHCC21C30	87 / 108	2 J Z	350	2 - 21	5 - 53	mg/kg	5A_DG-863	LL	8015M	0 - 0.5
TPH-EFH	EFH (C30-C40)	PHCC30C40	88 / 108	5 J Z	710	4 - 42	10 - 110	mg/kg	5A_DG-863	LL	8015M	0 - 0.5
TPH-EFH	EFH (C8-C11)	PHCC8C11	1 / 108	17	17	2 - 21	5 - 53	mg/kg	5A_DG-773	LL	8015M	0 - 0.5

Notes
LL - Eurofins Lancaster Laboratory
µg/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
% - percent
CAS = chemical abstract service
TPH = total petroleum hydrocarbon
GRO = gasoline range organic
EFH = extractable fuel hydrocarbon
HpCDF = heptachlorodibenzofuran
HxCDF = hexachlorodibenzofuran
PeCDF = pentachlorodibenzofuran
TCDD = tetrachlorodibenzodioxin
OCDD = octachlorodibenzodioxin
OCDF = octachlorodibenzofuran
2,4,5-T = 2,4,5-trichlorophenoxyacetic acid
2,4-D = 2-4-dichlorophenoxyacetic acid
2,4-DB = 2,4-dichlorophenoxy butyric acid
MCPA = 2-methyl-4-chlorophenoxyacetic acid
MCPP = methylchlorophenoxypropionic acid
PAH = polyaromatic hydrocarbon
PCB/PCT = polychlorinated biphenyls/polychlorinated triphenyls
SVOC = semivolatile organic compound
VOC = volatile organic compound
Specific concentration qualifiers are defined in Appendix A

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
1,4-Dioxane	1,4-Dioxane	123-91-1	0 / 4	-	-	4.8 - 6	15 - 18	µg/kg	-	-	-	-
Alcohols	2-Propanol	67-63-0	0 / 1	-	-	220 - 220	1100 - 1100	µg/kg	-	-	-	-
Alcohols	Ethanol	64-17-5	0 / 1	-	-	220 - 220	1100 - 1100	µg/kg	-	-	-	-
Alcohols	Methanol	67-56-1	0 / 1	-	-	220 - 220	1100 - 1100	µg/kg	-	-	-	-
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	39 / 68	0.411 J Z	231	0.0124 - 0.203	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	24 / 68	0.0695 J Z	28.6	0.0056 - 0.111	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	10 / 68	0.0204 J Z	2.95 J Z	0.00838 - 0.139	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	22 / 68	0.0351 J Z	1.49 J Z	0.0111 - 0.162	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	10 / 68	0.0325 J Z	1.39 J Z	0.00708 - 0.117	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	31 / 68	0.0347 J Z	6.95	0.0118 - 0.171	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	12 / 68	0.0448 J Z	1.2 J Z	0.00655 - 0.115	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	24 / 68	0.0527 J Z	2.83 J Z	0.0118 - 0.169	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	13 / 68	0.0647 J Z	0.562 J Z	0.00803 - 0.12	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	19 / 68	0.0317 J Z	0.718 J Z	0.00772 - 0.115	4.91 - 11.2	ng/kg	5A_DG-830	LL	1613B	2.75 - 3.75
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	22 / 68	0.0338 J Z	0.95 J Z	0.0138 - 0.224	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	15 / 68	0.0312 J Z	1.6 J Z	0.00592 - 0.102	4.91 - 11.2	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	2,3,4,7,8-PECDF	57117-31-4	10 / 68	0.0172 J Z	0.815 J Z	0.00749 - 0.112	4.91 - 11.2	ng/kg	5A_DG-830	LL	1613B	2.75 - 3.75
Dioxins	2,3,7,8-TCDD	1746-01-6	18 / 68	0.0288 J Z	0.296 J Z	0.0132 - 0.186	0.983 - 2.24	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	21 / 68	0.0212 J Z	0.417 J Z	0.00826 - 0.154	0.983 - 2.24	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	OCDD	3268-87-9	43 / 68	1.39 J Z	5390 J *#	0.0146 - 0.227	9.83 - 22.4	ng/kg	5A_DG-715	LL	1613B	6 - 7
Dioxins	OCDF	39001-02-0	21 / 68	0.401 J Z	88.7	0.0142 - 0.248	9.83 - 22.4	ng/kg	5A_DG-715	LL	1613B	6 - 7
Formaldehyde	Formaldehyde	50-00-0	2 / 5	9200	13000	1200 - 1300	2100 - 2200	µg/kg	5A_DG-521	LL	8315A	11 - 12
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	5 / 6	0.41 J E, Q, Z	1.3 J FD, E, Q	0.14 - 0.16	0.39 - 0.45	mg/kg	5A_DG-521	LL	7199	11 - 12
Mercury	Mercury	7439-97-6	24 / 68	0.0102 J Z	0.0304	0.0097 - 0.0113	0.0162 - 0.0188	mg/kg	5A_DG-819	LL	7471B	6.5 - 7.5
Metals	Aluminum	7429-90-5	68 / 68	10100 J E	34600	7.21 - 8.49	40 - 45.4	mg/kg	5A_DG-819	LL	6010C	6.5 - 7.5
Metals	Antimony	7440-36-0	3 / 68	0.735 J Q, Z	4.92 J Q	0.506 - 0.839	4 - 4.54	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Arsenic	7440-38-2	68 / 68	2.57 J Z	20.8	0.334 - 0.794	4 - 4.54	mg/kg	5A_DG-865	LL	6010C	9 - 10
Metals	Barium	7440-39-3	68 / 68	46.6	179	0.033 - 0.0374	1 - 1.13	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Beryllium	7440-41-7	68 / 68	0.383 J Z	1.66 J FD	0.067 - 0.076	1 - 1.13	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Boron	7440-42-8	56 / 68	0.975 J Z	5.34 J Z	0.839 - 0.952	10 - 11.3	mg/kg	5A_DG-860	LL	6010C	4 - 5
Metals	Cadmium	7440-43-9	30 / 68	0.0392 J FD, Z	1.09	0.0334 - 0.0862	1 - 1.13	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Calcium	7440-70-2	68 / 68	1520	7570 J E	3.34 - 4.43	20 - 22.7	mg/kg	5A_DG-508	LL	6010C	9 - 10
Metals	Chromium	7440-47-3	68 / 68	12.1	51.2 J FD	0.089 - 0.181	3 - 3.4	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Cobalt	7440-48-4	68 / 68	2.29	13.1 J FD, E	0.091 - 0.112	1 - 1.13	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Copper	7440-50-8	68 / 68	3.66	33.3	0.182 - 0.991	2 - 11	mg/kg	5A_DG-738	LL	6010C	3 - 4
Metals	Iron	7439-89-6	68 / 68	14800	45700	3.62 - 20.8	40 - 222	mg/kg	5A_DG-738	LL	6010C	3 - 4
Metals	Lead	7439-92-1	68 / 68	3.04 J Z	19.3	0.475 - 0.567	3 - 3.4	mg/kg	5A_DG-738	LL	6010C	3 - 4
Metals	Lithium	7439-93-2	68 / 68	15.5	61	0.34 - 0.61	4 - 4.5	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Magnesium	7439-95-4	68 / 68	3200	10700	1.67 - 1.91	10 - 11.3	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Manganese	7439-96-5	68 / 68	130	844	0.083 - 0.0941	1 - 1.13	mg/kg	5A_DG-826	LL	6010C	4 - 5
Metals	Molybdenum	7439-98-7	2 / 68	0.313 J F	2.74	0.17 - 0.193	2 - 2.27	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Nickel	7440-02-0	68 / 68	3.73	31.4	0.111 - 0.147	2 - 2.27	mg/kg	5A_DG-865	LL	6010C	9 - 10
Metals	Phosphorus	7723-14-0	68 / 68	102	868 J Q	0.516 - 3.28	10 - 11.3	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Potassium	7440-09-7	68 / 68	1040 J Q	4690 J Q	8.34 - 14.9	100 - 113	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Selenium	7782-49-2	45 / 68	0.105 J Z	0.532	0.1 - 0.113	0.4 - 0.454	mg/kg	5A_DG-735	LL	6020A	2.5 - 3.5
Metals	Silver	7440-22-4	52 / 68	0.0233 J Z	2.02	0.0202 - 0.0295	0.2 - 0.227	mg/kg	5A_DG-715	LL	6020A	6 - 7
Metals	Sodium	7440-23-5	68 / 68	76.7 J Z	895	16.7 - 18.9	100 - 113	mg/kg	5A_DG-776	LL	6010C	6 - 7
Metals	Strontium	7440-24-6	68 / 68	13.3 J Q	45.7 J FD	0.0344 - 0.0771	0.4 - 0.454	mg/kg	5A_DG-837	LL	6020A	4.5 - 5.5
Metals	Thallium	7440-28-0	68 / 68	0.199 J Q, Z	0.782	0.03 - 0.034	0.2 - 0.227	mg/kg	5A_DG-865	LL	6020A	9 - 10
Metals	Tin	7440-31-5	1 / 68	8.14 J Z	8.14 J Z	0.22 - 0.249	10 - 11.3	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Titanium	7440-32-6	68 / 68	993	1610	0.17 - 0.915	1 - 5.38	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Vanadium	7440-62-2	68 / 68	25.5	82.3 J FD	0.111 - 0.147	1 - 1.13	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Zinc	7440-66-6	68 / 68	32.5	691	0.2 - 0.227	4 - 4.54	mg/kg	5A_DG-508	LL	6010C	4 - 5
Metals	Zirconium	7440-67-7	64 / 68	1.02 J Z	6.9	0.839 - 0.952	5 - 5.67	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Moisture Content	Moisture	MOIST	70 / 70	2.3	12.3	0.1 - 0.1	0.1 - 0.1	%	5A_DG-518	LL	160.3M	15 - 16
PAHs	1-Methylnaphthalene	90-12-0	10 / 68	0.74 J Z	12 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	2-Methylnaphthalene	91-57-6	9 / 68	0.74 J Z	16 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Acenaphthene	83-32-9	0 / 68	-	-	0.68 - 7.2	1.7 - 18	µg/kg	-	-	-	-
PAHs	Acenaphthylene	208-96-8	1 / 68	0.6 J FD, Z	0.6 J FD, Z	0.34 - 3.6	1.7 - 18	µg/kg	5A_DG-709	LL	8270D SIM	4 - 5

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
PAHs	Anthracene	120-12-7	6 / 68	0.42 J FD, Z	3.8 J Z	0.34 - 3.6	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(a)anthracene	56-55-3	8 / 67	0.96 J Z	32	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(a)pyrene	50-32-8	9 / 67	0.77 J Z	28	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(b)fluoranthene	205-99-2	27 / 67	0.69 J Z	130	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(e)pyrene	192-97-2	3 / 68	5.2 J Z	100 J L, Z	3.4 - 36	17 - 180	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(g,h,i)perylene	191-24-2	7 / 68	0.81 J Z	23	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(k)fluoranthene	207-08-9	4 / 67	0.73 J Z	8 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	11 / 68	6.4 J Z	47	6.1 - 64	18 - 190	µg/kg	5A_DG-866	LL	8270D SIM	5.5 - 6.5
PAHs	Butylbenzylphthalate	85-68-7	0 / 68	-	-	6.1 - 64	18 - 190	µg/kg	-	-	-	-
PAHs	Chrysene	218-01-9	26 / 67	0.35 J Z	130	0.34 - 3.6	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Dibenzo(a,h)anthracene	53-70-3	3 / 68	1.3 J Z	13 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Diethylphthalate	84-66-2	1 / 68	7 J Z	7 J Z	6.1 - 64	18 - 190	µg/kg	5A_DG-826	LL	8270D SIM	4 - 5
PAHs	Dimethylphthalate	131-11-3	0 / 68	-	-	6.1 - 64	18 - 190	µg/kg	-	-	-	-
PAHs	Di-n-butylphthalate	84-74-2	0 / 68	-	-	6.1 - 64	18 - 190	µg/kg	-	-	-	-
PAHs	Di-n-octylphthalate	117-84-0	2 / 68	7.3 J Z	8.9 J Z	6.1 - 64	18 - 190	µg/kg	5A_DG-826	LL	8270D SIM	4 - 5
PAHs	Fluoranthene	206-44-0	14 / 68	0.72 J Z	17 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Fluorene	86-73-7	2 / 67	0.75 J Z	0.86 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-521	LL	8270D SIM	9 - 10
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	5 / 68	0.8 J FD, Z	9.8 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Morpholine	110-91-8	0 / 4	-	-	21 - 22	21 - 22	µg/kg	-	-	-	-
PAHs	Naphthalene	91-20-3	9 / 68	0.74 J Z	4.6 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-673	LL	8270D SIM	4 - 5
PAHs	N-Nitrosodimethylamine	62-75-9	1 / 68	0.75 J Z	0.75 J Z	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-596	LL	8270D SIM	4 - 5
PAHs	Phenanthrene	85-01-8	15 / 67	0.77 J Z	53	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Pyrene	129-00-0	14 / 67	0.82 J Z	31	0.68 - 7.2	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 38	-	-	3.4 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 38	-	-	5.2 - 5.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 38	-	-	4.2 - 4.7	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 38	-	-	4.2 - 4.7	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 38	-	-	3.4 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	1 / 38	8 J L, Z	8 J L, Z	4.5 - 5	17 - 19	µg/kg	5A_DG-508	LL	8082A	4 - 5
PCB/PCTs	Aroclor 1260	11096-82-5	0 / 38	-	-	4 - 4.4	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 38	-	-	3.4 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 38	-	-	3.4 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 38	-	-	10 - 11	34 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 38	-	-	10 - 11	34 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	0 / 38	-	-	10 - 11	34 - 38	µg/kg	-	-	-	-
Perchlorate	Perchlorate	14797-73-0	0 / 1	-	-	2.2 - 2.2	5.3 - 5.3	µg/kg	-	-	-	-
Pesticides	4,4'-DDD	72-54-8	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	4,4'-DDT	50-29-3	0 / 2	-	-	0.37 - 0.38	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Aldrin	309-00-2	0 / 2	-	-	0.18 - 0.18	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Alpha-Bhc	319-84-6	0 / 2	-	-	0.18 - 0.18	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Beta-Bhc	319-85-7	0 / 2	-	-	1 - 1	2 - 2	µg/kg	-	-	-	-
Pesticides	Chlordane	57-74-9	0 / 2	-	-	4.2 - 4.3	18 - 18	µg/kg	-	-	-	-
Pesticides	Delta-Bhc	319-86-8	0 / 2	-	-	0.47 - 0.48	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Endosulfan I	959-98-8	0 / 2	-	-	0.23 - 0.24	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	0 / 2	-	-	0.35 - 0.35	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin Ketone	53494-70-5	0 / 2	-	-	0.63 - 0.64	1.9 - 1.9	µg/kg	-	-	-	-
Pesticides	Gamma-Bhc (Lindane)	58-89-9	0 / 2	-	-	0.18 - 0.18	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 2	-	-	0.18 - 0.18	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	0 / 2	-	-	0.18 - 0.18	0.87 - 0.89	µg/kg	-	-	-	-
Pesticides	Methoxychlor	72-43-5	0 / 2	-	-	1.8 - 1.8	7 - 7.2	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 2	-	-	0.37 - 0.38	1.8 - 1.8	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 2	-	-	15 - 15	35 - 35	µg/kg	-	-	-	-
pH	pH	pH	68 / 68	6.19	8.18	0.01 - 0.01	0.01 - 0.01	pH	5A_DG-654	LL	9045M	3 - 4
SVOC	1,1'-Biphenyl	92-52-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 1	-	-	310 - 310	680 - 680	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 1	-	-	7 - 7	34 - 34	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 1	-	-	100 - 100	340 - 340	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 1	-	-	69 - 69	170 - 170	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 1	-	-	170 - 170	520 - 520	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 1	-	-	69 - 69	170 - 170	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 1	-	-	170 - 170	520 - 520	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 1	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 1	-	-	720 - 720	1700 - 1700	µg/kg	-	-	-	-
SVOC	Benzo(a)anthracene	56-55-3	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(a)pyrene	50-32-8	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(b)fluoranthene	205-99-2	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(k)fluoranthene	207-08-9	1 / 1	8 J Z	8 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzoic Acid	65-85-0	0 / 1	-	-	170 - 170	520 - 520	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 1	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Chrysene	218-01-9	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Dibenzofuran	132-64-9	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Fluoranthene	206-44-0	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Hexachlorobenzene	118-74-1	0 / 1	-	-	3 - 3	18 - 18	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 1	-	-	170 - 170	520 - 520	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 1	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 1	-	-	34 - 34	180 - 180	µg/kg	-	-	-	-
SVOC	Phenanthrene	85-01-8	1 / 1	4 J Z	4 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Phenol	108-95-2	0 / 1	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Pyrene	129-00-0	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Pyridine	110-86-1	0 / 1	-	-	69 - 69	170 - 170	µg/kg	-	-	-	-
Terphenyls	m-Terphenyl	92-06-8	1 / 2	0.093 J Z	0.093 J Z	0.069 - 0.069	0.17 - 0.18	mg/kg	5A_DG-709	LL	8015B	8 - 9
Terphenyls	o-Terphenyl	84-15-1	0 / 2	-	-	0.069 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-
Terphenyls	p-Terphenyl	92-94-4	0 / 2	-	-	0.069 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 68	-	-	2 - 110	5.1 - 270	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	6 / 68	2.3 J Z	15	2 - 110	5.1 - 270	mg/kg	5A_DG-596	LL	8015M	4 - 5
TPH-EFH	EFH (C21-C30)	PHCC21C30	31 / 68	2.1 J Z	700	2 - 110	5.1 - 270	mg/kg	5A_DG-508	LL	8015M	4 - 5
TPH-EFH	EFH (C30-C40)	PHCC30C40	30 / 68	4.7 J Z	2200	4.1 - 220	10 - 540	mg/kg	5A_DG-508	LL	8015M	4 - 5
TPH-EFH	EFH (C8-C11)	PHCC8C11	0 / 68	-	-	2 - 110	5.1 - 270	mg/kg	-	-	-	-
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	3 / 68	0.5 J Z	3.4 J Z	0.2 - 2.6	0.9 - 13	mg/kg	5A_DG-508	LL	8015M	4 - 5
VOC	1,1,1,2-Tetrachloroethane	630-20-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,1-Trichloroethane	71-55-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2,2-Tetrachloroethane	79-34-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloroethane	79-00-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethane	75-34-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethene	75-35-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloropropene	563-58-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichlorobenzene	87-61-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichloropropane	96-18-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trichlorobenzene	120-82-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trimethylbenzene	95-63-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromo-3-chloropropane	96-12-8	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromoethane	106-93-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichlorobenzene	95-50-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloroethane	107-06-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloropropane	78-87-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3,5-Trimethylbenzene	108-67-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichlorobenzene	541-73-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichloropropane	142-28-9	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,4-Dichlorobenzene	106-46-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1-Chlorohexane	544-10-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2,2-Dichloropropane	594-20-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Butanone (MEK)	78-93-3	2 / 4	5 J Z	12	4 - 5	10 - 11	µg/kg	5A_DG-518	LL	8260B	7 - 8
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	2-Chloroethyl Vinyl Ether	110-75-8	0 / 4	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	2-Chlorotoluene	95-49-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Hexanone	591-78-6	0 / 4	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	2-Phenylbutane	135-98-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Chlorotoluene	106-43-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	0 / 4	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	Acetone	67-64-1	3 / 4	29	62	7 - 8	20 - 23	µg/kg	5A_DG-518	LL	8260B	7 - 8
VOC	Acrolein	107-02-8	0 / 4	-	-	20 - 23	100 - 110	µg/kg	-	-	-	-
VOC	Acrylonitrile	107-13-1	0 / 4	-	-	4 - 5	20 - 23	µg/kg	-	-	-	-
VOC	Benzene	71-43-2	0 / 4	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Bromobenzene	108-86-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromochloromethane	74-97-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromodichloromethane	75-27-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromoform	75-25-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromomethane	74-83-9	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Disulfide	75-15-0	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Tetrachloride	56-23-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chlorobenzene	108-90-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloroethane	75-00-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chloroform	67-66-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloromethane	74-87-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chlorotrifluoroethylene	79-38-9	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,2-Dichloroethene	156-59-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,3-Dichloropropene	10061-01-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Cymene	99-87-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Di isopropyl Ether	108-20-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromochloromethane	124-48-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromomethane	74-95-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
VOC	Dichlorodifluoromethane	75-71-8	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Ethylbenzene	100-41-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Hexachloro-1,3-butadiene	87-68-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Isopropylbenzene	98-82-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	m,p-Xylene	179601-23-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Iodide	74-88-4	0 / 4	-	-	3 - 3	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Tert-Butyl Ether	1634-04-4	0 / 4	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Methylene Chloride	75-09-2	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	n-Butylbenzene	104-51-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	n-Propylbenzene	103-65-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	o-Xylene	95-47-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Styrene	100-42-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butyl ethyl ether	637-92-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butylbenzene	98-06-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary amyl methyl ether	994-05-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary butyl alcohol	75-65-0	0 / 4	-	-	20 - 23	50 - 57	µg/kg	-	-	-	-
VOC	Tetrachloroethene	127-18-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Toluene	108-88-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,2-Dichloroethene	156-60-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,3-Dichloropropene	10061-02-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichloroethene	79-01-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichlorofluoromethane	75-69-4	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Vinyl Acetate	108-05-4	0 / 4	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	Vinyl Chloride	75-01-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Notes
LL - Eurofins Lancaster Laboratory
µg/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
% - percent
CAS = chemical abstract service
TPH = total petroleum hydrocarbon
GRO = gasoline range organic
EFH = extractable fuel hydrocarbon
HpCDF = heptachlorodibenzofuran
HxCDF = hexachlorodibenzofuran
PeCDF = pentachlorodibenzofuran
TCDD = tetrachlorodibenzodioxin
OCDD = octachlorodibenzodioxin
OCDF = octachlorodibenzofuran
2,4,5-T = 2,4,5-trichlorophenoxyacetic acid
2,4-D = 2-4-dichlorophenoxyacetic acid
2,4-DB = 2,4-dichlorophenoxy butyric acid
MCPA = 2-methyl-4-chlorophenoxyacetic acid
MCPP = methylchlorophenoxypropionic acid
PAH = polyaromatic hydrocarbon
PCB/PCT = polychlorinated biphenyls/polychlorinated triphenyls
SVOC = semivolatile organic compound
VOC = volatile organic compound
Specific concentration qualifiers are defined in Appendix A

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
1,4-Dioxane	1,4-Dioxane	123-91-1	0 / 4	-	-	4.8 - 6	15 - 18	µg/kg	-	-	-	-
Alcohols	2-Propanol	67-63-0	0 / 2	-	-	200 - 220	1000 - 1100	µg/kg	-	-	-	-
Alcohols	Ethanol	64-17-5	0 / 2	-	-	200 - 220	1000 - 1100	µg/kg	-	-	-	-
Alcohols	Methanol	67-56-1	1 / 2	480 J FD, Z, *#	480 J FD, Z, *#	200 - 220	1000 - 1100	µg/kg	5A_DG-628	LL	8015C	0 - 0.5
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	133 / 176	0.35 J Z	3820 J *#	0.0124 - 0.403	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	110 / 176	0.0695 J Z	275	0.0056 - 0.138	4.81 - 11.2	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	59 / 176	0.0204 J Z	30.1	0.0084 - 0.192	4.81 - 11.2	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	94 / 176	0.018 J Z	44.9	0.0111 - 0.162	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	62 / 176	0.0325 J Z	15.2	0.0071 - 0.133	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	124 / 176	0.0347 J Z	144	0.0118 - 0.171	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	69 / 176	0.0448 J Z	7.65	0.0066 - 0.138	4.81 - 11.2	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	113 / 176	0.0527 J Z	105	0.0118 - 0.169	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	61 / 176	0.0647 J Z	1.53 J Z	0.008 - 0.147	4.81 - 11.2	ng/kg	5A_DG-673	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	68 / 176	0.0317 J Z	2.82 J Z	0.0077 - 0.115	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	76 / 176	0.0338 J Z	22.8	0.0138 - 0.224	4.81 - 11.2	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	69 / 176	0.0312 J Z	7.89	0.0059 - 0.129	4.81 - 11.2	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Dioxins	2,3,4,7,8-PECDF	57117-31-4	53 / 176	0.0172 J Z	2.67 J Z	0.0075 - 0.112	4.81 - 11.2	ng/kg	5A_DG-859	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	66 / 176	0.0246 J Z	2.23	0.0132 - 0.186	0.963 - 2.24	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	86 / 176	0.0152 J Z	1.07	0.0083 - 0.154	0.963 - 2.24	ng/kg	5A_DG-859	LL	1613B	0 - 0.5
Dioxins	OCDD	3268-87-9	146 / 176	1.25 J Z	101000 J *#	0.0146 - 0.239	9.63 - 22.4	ng/kg	5A_DG-858	LL	1613B	0 - 0.5
Dioxins	OCDF	39001-02-0	106 / 176	0.401 J Z	1650	0.0142 - 0.248	9.63 - 22.4	ng/kg	5A_DG-842	LL	1613B	0 - 0.5
Formaldehyde	Formaldehyde	50-00-0	2 / 10	9200	13000	1200 - 12000	2000 - 20000	µg/kg	5A_DG-521	LL	8315A	11 - 12
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	0 / 1	-	-	180 - 180	180 - 180	µg/kg	-	-	-	-
Herbicides	2,4,5-T	93-76-5	0 / 1	-	-	0.83 - 0.83	1.7 - 1.7	µg/kg	-	-	-	-
Herbicides	2,4-D	94-75-7	0 / 1	-	-	12 - 12	36 - 36	µg/kg	-	-	-	-
Herbicides	2,4-DB	94-82-6	0 / 1	-	-	6.3 - 6.3	17 - 17	µg/kg	-	-	-	-
Herbicides	Dicamba	1918-00-9	0 / 1	-	-	4 - 4	12 - 12	µg/kg	-	-	-	-
Herbicides	Dichlorprop	120-36-5	0 / 1	-	-	9.1 - 9.1	17 - 17	µg/kg	-	-	-	-
Herbicides	Dinitrobutyl Phenol	88-85-7	0 / 1	-	-	9.1 - 9.1	24 - 24	µg/kg	-	-	-	-
Herbicides	MCPA	94-74-6	0 / 1	-	-	770 - 770	2500 - 2500	µg/kg	-	-	-	-
Herbicides	MCPP	93-65-2	0 / 1	-	-	760 - 760	2500 - 2500	µg/kg	-	-	-	-
Herbicides	Silvex (2,4,5-TP)	93-72-1	0 / 1	-	-	0.76 - 0.76	1.7 - 1.7	µg/kg	-	-	-	-
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	10 / 11	0.28 J Z	1.3 J FD, E, Q	0.14 - 0.16	0.39 - 0.45	mg/kg	5A_DG-521	LL	7199	11 - 12
Mercury	Mercury	7439-97-6	90 / 174	0.01 J Z	0.288	0.0093 - 0.011	0.0156 - 0.0188	mg/kg	5A_DG-719	LL	7471B	0 - 0.5
Metals	Aluminum	7429-90-5	174 / 174	7900	37300	7 - 8.64	38.8 - 45.4	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Antimony	7440-36-0	13 / 174	0.529 J Q, Z	4.92 J Q	0.485 - 0.839	3.88 - 4.54	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Arsenic	7440-38-2	174 / 174	1.99 J Q, Z	20.8	0.32 - 0.794	3.88 - 4.54	mg/kg	5A_DG-865	LL	6010C	9 - 10
Metals	Barium	7440-39-3	174 / 174	46.6	179	0.032 - 0.037	0.969 - 1.13	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Beryllium	7440-41-7	174 / 174	0.31 J Z	1.66 J FD	0.0649 - 0.076	0.969 - 1.13	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Boron	7440-42-8	148 / 174	0.975 J Z	15.2	0.804 - 0.952	9.69 - 11.3	mg/kg	5A_DG-873	LL	6010C	0 - 0.5
Metals	Cadmium	7440-43-9	96 / 174	0.0392 J FD, Z	1.09	0.032 - 0.086	0.969 - 1.13	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Calcium	7440-70-2	174 / 174	1520	13700	3.24 - 4.5	19.4 - 22.7	mg/kg	5A_DG-696	LL	6010C	0 - 0.5
Metals	Chromium	7440-47-3	174 / 174	12.1	51.2 J FD	0.0853 - 0.181	2.91 - 3.4	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Cobalt	7440-48-4	174 / 174	2.29	13.4	0.0872 - 0.112	0.969 - 1.13	mg/kg	5A_DG-772	LL	6010C	0 - 0.5
Metals	Copper	7440-50-8	169 / 174	0.571 J FD, Q, Z	33.3	0.174 - 1.8	1.94 - 20	mg/kg	5A_DG-738	LL	6010C	3 - 4
Metals	Iron	7439-89-6	174 / 174	14700	45700	3.51 - 20.8	38.8 - 222	mg/kg	5A_DG-738	LL	6010C	3 - 4
Metals	Lead	7439-92-1	174 / 174	3.04 J Z	69.6	0.456 - 0.567	2.91 - 3.4	mg/kg	5A_DG-861	LL	6010C	0 - 0.5
Metals	Lithium	7439-93-2	174 / 174	14.6	61	0.33 - 0.62	3.9 - 4.5	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Magnesium	7439-95-4	174 / 174	2870	10700	1.62 - 1.94	9.69 - 11.3	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Manganese	7439-96-5	174 / 174	130	844	0.0804 - 0.094	0.969 - 1.13	mg/kg	5A_DG-826	LL	6010C	4 - 5
Metals	Molybdenum	7439-98-7	3 / 174	0.313 J F	2.74	0.165 - 0.193	1.94 - 2.27	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Nickel	7440-02-0	174 / 174	3.73	31.4	0.107 - 0.147	1.94 - 2.27	mg/kg	5A_DG-865	LL	6010C	9 - 10
Metals	Phosphorus	7723-14-0	174 / 174	102	868 J Q	0.494 - 3.28	9.69 - 11.3	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Potassium	7440-09-7	174 / 174	1040 J Q	4960	8.09 - 15.1	96.9 - 113	mg/kg	5A_DG-840	LL	6010C	0 - 0.5
Metals	Selenium	7782-49-2	137 / 174	0.0998 J Z	0.537	0.0969 - 0.113	0.388 - 0.454	mg/kg	5A_DG-772	LL	6020A	0 - 0.5
Metals	Silver	7440-22-4	148 / 174	0.0233 J Z	13.6 J FD	0.0194 - 0.03	0.194 - 0.227	mg/kg	5A_DG-715	LL	6020A	0 - 0.5
Metals	Sodium	7440-23-5	174 / 174	58.4 J Z	895	16.2 - 18.9	96.9 - 113	mg/kg	5A_DG-776	LL	6010C	6 - 7
Metals	Strontium	7440-24-6	174 / 174	11.8 J Q	53.8 J Q, A	0.033 - 0.077	0.388 - 0.454	mg/kg	5A_DG-696	LL	6020A	0 - 0.5
Metals	Thallium	7440-28-0	174 / 174	0.199 J Z 0.199 J Q, Z	0.782	0.0291 - 0.034	0.194 - 0.227	mg/kg	5A_DG-865	LL	6020A	9 - 10

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
Metals	Tin	7440-31-5	1 / 174	8.14 J Z	8.14 J Z	0.213 - 0.249	9.69 - 11.3	mg/kg	5A_DG-833	LL	6010C	2.5 - 3.5
Metals	Titanium	7440-32-6	174 / 174	898	1610	0.165 - 0.915	0.969 - 5.38	mg/kg	5A_DG-736	LL	6010C	3 - 4
Metals	Vanadium	7440-62-2	174 / 174	24.5	82.3 J FD	0.107 - 0.147	0.969 - 1.13	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Metals	Zinc	7440-66-6	174 / 174	32.5	691	0.194 - 0.227	3.88 - 4.54	mg/kg	5A_DG-508	LL	6010C	4 - 5
Metals	Zirconium	7440-67-7	162 / 174	0.901 J Q, E, Z	6.9	0.804 - 0.952	4.85 - 5.67	mg/kg	5A_DG-837	LL	6010C	4.5 - 5.5
Moisture Content	Moisture	MOIST	185 / 185	0.58	13.7	0.1 - 0.1	0.1 - 0.1	%	5A_DG-836	LL	160.3M	0 - 0.5
PAHs	1-Methylnaphthalene	90-12-0	19 / 174	0.69 J Z	13 J Z	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-673 5A_DG-631	LL LL	8270D SIM 8270D SIM	0 - 0.5 0 - 0.5
PAHs	2-Methylnaphthalene	91-57-6	28 / 174	0.7 J Z	16 J Z 16	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-673 5A_DG-508	LL LL	8270D SIM 8270D SIM	0 - 0.5 4 - 5
PAHs	Acenaphthene	83-32-9	4 / 174	1.4 J Z	7.7	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Acenaphthylene	208-96-8	7 / 174	0.4 J Z	1.5 J Z	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Anthracene	120-12-7	29 / 174	0.39 J Z	18	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)anthracene	56-55-3	41 / 173	0.68 J Z	71	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-777	LL	8270D SIM	0 - 0.5
PAHs	Benzo(a)pyrene	50-32-8	53 / 173	0.67 J Z	98	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(b)fluoranthene	205-99-2	103 / 173	0.69 J Z	150	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(e)pyrene	192-97-2	11 / 174	3.7 J FD, Q, Z	100 J L, Z	3.3 - 36	17 - 180	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Benzo(g,h,i)perylene	191-24-2	43 / 174	0.69 J Z	80	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Benzo(k)fluoranthene	207-08-9	37 / 173	0.71 J Z	52	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	47 / 174	6.1 J Z	430	5.9 - 64	18 - 190	µg/kg	5A_DG-866	LL	8270D SIM	0 - 0.5
PAHs	Butylbenzylphthalate	85-68-7	6 / 174	6.5 J Z	71	5.9 - 64	18 - 190	µg/kg	5A_DG-785	LL	8270D SIM	0 - 0.5
PAHs	Chrysene	218-01-9	106 / 173	0.35 J Z	130	0.33 - 3.6	1.7 - 18	µg/kg	5A_DG-508	LL	8270D SIM	4 - 5
PAHs	Dibenzo(a,h)anthracene	53-70-3	13 / 174	0.71 J Z	20	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Diethylphthalate	84-66-2	1 / 174	7 J Z	7 J Z	5.9 - 64	18 - 190	µg/kg	5A_DG-826	LL	8270D SIM	4 - 5
PAHs	Dimethylphthalate	131-11-3	1 / 174	110	110	5.9 - 64	18 - 190	µg/kg	5A_DG-776	LL	8270D SIM	0 - 0.5
PAHs	Di-n-butylphthalate	84-74-2	1 / 174	45	45	5.9 - 64	18 - 190	µg/kg	5A_DG-521	LL	8270D SIM	0 - 0.5
PAHs	Di-n-octylphthalate	117-84-0	39 / 174	6.9 J Z	230	5.9 - 64	18 - 190	µg/kg	5A_DG-824	LL	8270D SIM	0 - 0.5
PAHs	Fluoranthene	206-44-0	80 / 173	0.72 J Z	110	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-859	LL	8270D SIM	0 - 0.5
PAHs	Fluorene	86-73-7	5 / 174	0.75 J Z	5.8	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	23 / 174	0.71 J ZZ	90	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-654	LL	8270D SIM	0 - 0.5
PAHs	Morpholine	110-91-8	0 / 7	-	-	20 - 22	20 - 22	µg/kg	-	-	-	-
PAHs	Naphthalene	91-20-3	31 / 174	0.74 J Z	8.5	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-673	LL	8270D SIM	0 - 0.5
PAHs	N-Nitrosodimethylamine	62-75-9	2 / 174	0.72 J Z	0.75 J Z	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-596	LL	8270D SIM	4 - 5
PAHs	Phenanthrene	85-01-8	80 / 173	0.73 J Z	85	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-864	LL	8270D SIM	0 - 0.5
PAHs	Pyrene	129-00-0	81 / 173	0.74 J Z	100	0.66 - 7.2	1.7 - 18	µg/kg	5A_DG-864 5A_DG-777	LL LL	8270D SIM 8270D SIM	0 - 0.5 0 - 0.5
PCB/PCTs	Aroclor 1016	12674-11-2	0 / 85	-	-	3.3 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1221	11104-28-2	0 / 85	-	-	5.1 - 5.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1232	11141-16-5	0 / 85	-	-	4.1 - 4.7	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1242	53469-21-9	0 / 85	-	-	4.1 - 4.7	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1248	12672-29-6	0 / 85	-	-	3.3 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1254	11097-69-1	4 / 85	8 J L, Z	45	4.4 - 5	17 - 19	µg/kg	5A_DG-788	LL	8082A	0 - 0.5
PCB/PCTs	Aroclor 1260	11096-82-5	0 / 85	-	-	3.9 - 4.4	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1262	37324-23-5	0 / 85	-	-	3.3 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 1268	11100-14-4	0 / 85	-	-	3.3 - 3.8	17 - 19	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5432	63496-31-1	0 / 85	-	-	10 - 11	33 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5442	12642-23-8	0 / 85	-	-	10 - 11	33 - 38	µg/kg	-	-	-	-
PCB/PCTs	Aroclor 5460	11126-42-4	5 / 85	14 J Z	29 J Z	10 - 11	33 - 38	µg/kg	5A_DG-521	LL	8082A	0 - 0.5
Perchlorate	Perchlorate	14797-73-0	0 / 2	-	-	2.2 - 2.2	5.1 - 5.3	µg/kg	-	-	-	-
Pesticides	4,4'-DDD	72-54-8	0 / 9	-	-	0.33 - 0.35	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	4,4'-DDE	72-55-9	2 / 9	0.52 J Z	8 J FD, Q	0.33 - 1.4	1.7 - 1.8	µg/kg	5A_DG-708	LL	8081B	0 - 0.5
Pesticides	4,4'-DDT	50-29-3	3 / 9	0.82 J Z	11 J FD, Q	0.35 - 0.38	1.7 - 1.8	µg/kg	5A_DG-708	LL	8081B	0 - 0.5
Pesticides	Aldrin	309-00-2	0 / 9	-	-	0.17 - 0.18	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Alpha-Bhc	319-84-6	0 / 9	-	-	0.17 - 0.18	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Beta-Bhc	319-85-7	0 / 9	-	-	0.97 - 1	1.9 - 2	µg/kg	-	-	-	-
Pesticides	Chlordane	57-74-9	0 / 9	-	-	4 - 4.3	17 - 18	µg/kg	-	-	-	-
Pesticides	Delta-Bhc	319-86-8	0 / 9	-	-	0.45 - 0.48	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Dieldrin	60-57-1	0 / 9	-	-	0.33 - 0.35	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endosulfan I	959-98-8	0 / 9	-	-	0.22 - 0.24	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Endosulfan II	33213-65-9	0 / 9	-	-	0.33 - 0.35	1.7 - 1.8	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
Pesticides	Endosulfan Sulfate	1031-07-8	0 / 9	-	-	0.33 - 0.35	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin	72-20-8	0 / 9	-	-	0.33 - 0.35	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Endrin Aldehyde	7421-93-4	1 / 9	0.49 J Z	0.49 J Z	0.33 - 0.35	1.7 - 1.8	µg/kg	5A_DG-773	LL	8081B	0 - 0.5
Pesticides	Endrin Ketone	53494-70-5	0 / 9	-	-	0.61 - 0.64	1.8 - 1.9	µg/kg	-	-	-	-
Pesticides	Gamma-Bhc (Lindane)	58-89-9	0 / 9	-	-	0.17 - 0.18	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Heptachlor	76-44-8	0 / 9	-	-	0.17 - 0.18	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Heptachlor Epoxide	1024-57-3	0 / 9	-	-	0.17 - 0.18	0.84 - 0.89	µg/kg	-	-	-	-
Pesticides	Methoxychlor	72-43-5	0 / 9	-	-	1.7 - 1.8	6.8 - 7.2	µg/kg	-	-	-	-
Pesticides	Mirex	2385-85-5	0 / 9	-	-	0.35 - 0.38	1.7 - 1.8	µg/kg	-	-	-	-
Pesticides	Technical Toxaphene	8001-35-2	0 / 9	-	-	14 - 15	33 - 35	µg/kg	-	-	-	-
pH	pH	pH	174 / 174	4.55	10.3	0.01 - 0.01	0.01 - 0.01	pH	5A_DG-719	LL	9045M	0 - 0.5
SVOC	1,1'-Biphenyl	92-52-4	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2,4-Trichlorobenzene	120-82-1	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Dichlorobenzene	95-50-1	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,2-Diphenylhydrazine	122-66-7	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,3-Dichlorobenzene	541-73-1	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	1,4-Dichlorobenzene	106-46-7	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,5-Trichlorophenol	95-95-4	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4,6-Trichlorophenol	88-06-2	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dichlorophenol	120-83-2	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dimethylphenol	105-67-9	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2,4-Dinitrophenol	51-28-5	0 / 2	-	-	300 - 310	670 - 680	µg/kg	-	-	-	-
SVOC	2,6-Dichlorophenol	87-65-0	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Chloronaphthalene	91-58-7	0 / 2	-	-	7 - 7	33 - 34	µg/kg	-	-	-	-
SVOC	2-Chlorophenol	95-57-8	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Methylphenol	95-48-7	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitroaniline	88-74-4	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	2-Nitrophenol	88-75-5	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	3,3'-Dichlorobenzidine	91-94-1	0 / 2	-	-	100 - 100	340 - 340	µg/kg	-	-	-	-
SVOC	3,5-Dimethylphenol	108-68-9	0 / 2	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	3-Nitroaniline	99-09-2	0 / 2	-	-	68 - 69	170 - 170	µg/kg	-	-	-	-
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	0 / 2	-	-	170 - 170	510 - 520	µg/kg	-	-	-	-
SVOC	4-Bromophenyl-phenylether	101-55-3	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloro-3-methylphenol	59-50-7	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chloroaniline	106-47-8	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Chlorophenyl-phenylether	7005-72-3	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Methylphenol	106-44-5	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	4-Nitroaniline	100-01-6	0 / 2	-	-	68 - 69	170 - 170	µg/kg	-	-	-	-
SVOC	4-Nitrophenol	100-02-7	0 / 2	-	-	170 - 170	510 - 520	µg/kg	-	-	-	-
SVOC	Aniline	62-53-3	0 / 2	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	Benzidine	92-87-5	0 / 1	-	-	720 - 720	1700 - 1700	µg/kg	-	-	-	-
SVOC	Benzo(a)anthracene	56-55-3	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(a)pyrene	50-32-8	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(b)fluoranthene	205-99-2	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzo(k)fluoranthene	207-08-9	1 / 1	8 J Z	8 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Benzoic Acid	65-85-0	0 / 2	-	-	170 - 170	510 - 520	µg/kg	-	-	-	-
SVOC	Benzyl Alcohol	100-51-6	0 / 2	-	-	170 - 170	340 - 340	µg/kg	-	-	-	-
SVOC	bis(2-chloroethoxy)methane	111-91-1	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroethyl) ether	111-44-4	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Carbazole	86-74-8	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Chrysene	218-01-9	1 / 1	11 J Z	11 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Dibenzofuran	132-64-9	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Diphenylamine	NDPA122-39-4	0 / 2	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Fluoranthene	206-44-0	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Hexachlorobenzene	118-74-1	0 / 2	-	-	3 - 3	17 - 18	µg/kg	-	-	-	-
SVOC	Hexachlorobutadiene	87-68-3	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Hexachlorocyclopentadiene	77-47-4	0 / 2	-	-	170 - 170	510 - 520	µg/kg	-	-	-	-
SVOC	Hexachloroethane	67-72-1	0 / 2	-	-	34 - 34	170 - 170	µg/kg	-	-	-	-
SVOC	Isophorone	78-59-1	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Nitrobenzene	98-95-3	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-

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

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
SVOC	N-Nitroso-di-n-propylamine	621-64-7	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	N-Nitrosodiphenylamine	86-30-6	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Pentachlorophenol	87-86-5	0 / 2	-	-	34 - 34	170 - 180	µg/kg	-	-	-	-
SVOC	Phenanthrene	85-01-8	1 / 1	4 J Z	4 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Phenol	108-95-2	0 / 2	-	-	17 - 17	34 - 34	µg/kg	-	-	-	-
SVOC	Pyrene	129-00-0	1 / 1	14 J Z	14 J Z	3 - 3	18 - 18	µg/kg	5A_DG-715	LL	8270D	6 - 7
SVOC	Pyridine	110-86-1	0 / 2	-	-	68 - 69	170 - 170	µg/kg	-	-	-	-
Terphenyls	m-Terphenyl	92-06-8	2 / 5	0.093 J Z	0.11 J Z	0.068 - 0.069	0.17 - 0.18	mg/kg	5A_DG-719	LL	8015B	0 - 0.5
Terphenyls	o-Terphenyl	84-15-1	0 / 5	-	-	0.068 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-
Terphenyls	p-Terphenyl	92-94-4	0 / 5	-	-	0.068 - 0.069	0.17 - 0.18	mg/kg	-	-	-	-
TPH-EFH	EFH (C12-C14)	PHCC12C14	0 / 176	-	-	2 - 110	5 - 270	mg/kg	-	-	-	-
TPH-EFH	EFH (C15-C20)	PHCC15C20	23 / 176	2 J Z	15	2 - 110	5 - 270	mg/kg	5A_DG-596	LL	8015M	4 - 5
TPH-EFH	EFH (C21-C30)	PHCC21C30	118 / 176	2 J Z	700	2 - 110	5 - 270	mg/kg	5A_DG-508	LL	8015M	4 - 5
TPH-EFH	EFH (C30-C40)	PHCC30C40	118 / 176	4.7 J Z	2200	4 - 220	10 - 540	mg/kg	5A_DG-508	LL	8015M	4 - 5
TPH-EFH	EFH (C8-C11)	PHCC8C11	1 / 176	17	17	2 - 110	5 - 270	mg/kg	5A_DG-773	LL	8015M	0 - 0.5
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	3 / 68	0.5 J Z	3.4 J Z	0.2 - 2.6	0.9 - 13	mg/kg	5A_DG-508	LL	8015M	4 - 5
VOC	1,1,1,2-Tetrachloroethane	630-20-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,1-Trichloroethane	71-55-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2,2-Tetrachloroethane	79-34-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,1,2-Trichloroethane	79-00-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethane	75-34-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloroethene	75-35-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,1-Dichloropropene	563-58-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichlorobenzene	87-61-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,3-Trichloropropane	96-18-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trichlorobenzene	120-82-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2,4-Trimethylbenzene	95-63-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromo-3-chloropropane	96-12-8	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dibromoethane	106-93-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichlorobenzene	95-50-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloroethane	107-06-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,2-Dichloropropane	78-87-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3,5-Trimethylbenzene	108-67-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichlorobenzene	541-73-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,3-Dichloropropane	142-28-9	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1,4-Dichlorobenzene	106-46-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	1-Chlorohexane	544-10-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2,2-Dichloropropane	594-20-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Butanone (MEK)	78-93-3	2 / 4	5 J Z	12	4 - 5	10 - 11	µg/kg	5A_DG-518	LL	8260B	7 - 8
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	2-Chloroethyl Vinyl Ether	110-75-8	0 / 4	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	2-Chlorotoluene	95-49-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	2-Hexanone	591-78-6	0 / 4	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	2-Phenylbutane	135-98-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Chlorotoluene	106-43-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	0 / 4	-	-	3 - 3	10 - 11	µg/kg	-	-	-	-
VOC	Acetone	67-64-1	3 / 4	29	62	7 - 8	20 - 23	µg/kg	5A_DG-518	LL	8260B	7 - 8
VOC	Acrolein	107-02-8	0 / 4	-	-	20 - 23	100 - 110	µg/kg	-	-	-	-
VOC	Acrylonitrile	107-13-1	0 / 4	-	-	4 - 5	20 - 23	µg/kg	-	-	-	-
VOC	Benzene	71-43-2	0 / 4	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Bromobenzene	108-86-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromochloromethane	74-97-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromodichloromethane	75-27-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromoform	75-25-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Bromomethane	74-83-9	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Disulfide	75-15-0	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Carbon Tetrachloride	56-23-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chlorobenzene	108-90-7	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Chloroethane	75-00-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chloroform	67-66-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Group	Chemical	CAS No	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Lab of Maximum Concentration	Method of Maximum Concentration	Depth of Maximum Concentration
VOC	Chloromethane	74-87-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Chlorotrifluoroethylene	79-38-9	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,2-Dichloroethene	156-59-2	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	cis-1,3-Dichloropropene	10061-01-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Cymene	99-87-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Di isopropyl Ether	108-20-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromochloromethane	124-48-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dibromomethane	74-95-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Dichlorodifluoromethane	75-71-8	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Ethylbenzene	100-41-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Hexachloro-1,3-butadiene	87-68-3	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Isopropylbenzene	98-82-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	m,p-Xylene	179601-23-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Iodide	74-88-4	0 / 4	-	-	3 - 3	5 - 6	µg/kg	-	-	-	-
VOC	Methyl Tert-Butyl Ether	1634-04-4	0 / 4	-	-	0.5 - 0.6	5 - 6	µg/kg	-	-	-	-
VOC	Methylene Chloride	75-09-2	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	n-Butylbenzene	104-51-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	n-Propylbenzene	103-65-1	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	o-Xylene	95-47-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Styrene	100-42-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butyl ethyl ether	637-92-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	tert-Butylbenzene	98-06-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary amyl methyl ether	994-05-8	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Tertiary butyl alcohol	75-65-0	0 / 4	-	-	20 - 23	50 - 57	µg/kg	-	-	-	-
VOC	Tetrachloroethene	127-18-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Toluene	108-88-3	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,2-Dichloroethene	156-60-5	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	trans-1,3-Dichloropropene	10061-02-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichloroethene	79-01-6	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-
VOC	Trichlorofluoromethane	75-69-4	0 / 4	-	-	2 - 2	5 - 6	µg/kg	-	-	-	-
VOC	Vinyl Acetate	108-05-4	0 / 4	-	-	2 - 2	10 - 11	µg/kg	-	-	-	-
VOC	Vinyl Chloride	75-01-4	0 / 4	-	-	1 - 1	5 - 6	µg/kg	-	-	-	-

Notes
LL - Eurofins Lancaster Laboratory
µg/kg- microgram per kilogram
mg/kg - milligram per kilogram
ng/kg - nanogram per kilogram
J - Result is an estimated value
% - percent
CAS = chemical abstract service
TPH = total petroleum hydrocarbon
GRO = gasoline range organic
EFH = extractable fuel hydrocarbon
HpCDF = heptachlorodibenzofuran
HxCDF = hexachlorodibenzofuran
PeCDF = pentachlorodibenzofuran
TCDD = tetrachlorodibenzodioxin
OCDD = octachlorodibenzodioxin
OCDF = octachlorodibenzofuran
2,4,5-T = 2,4,5-trichlorophenoxyacetic acid
2,4-D = 2-4-dichlorophenoxyacetic acid
2,4-DB = 2,4-dichlorophenoxy butyric acid
MCPA = 2-methyl-4-chlorophenoxyacetic acid
MCPP = methylchlorophenoxypropionic acid
PAH = polyaromatic hydrocarbon
PCB/PCT = polychlorinated biphenyls/polychlorinated triphenyls
SVOC = semivolatile organic compound
VOC = volatile organic compound
Specific concentration qualifiers are defined in Appendix A

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Section 4

Data Usability Assessment

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

4.1 Usability Summary

For the Subarea 5A data usability assessment, 29 data sets, or SDGs were reviewed. An SDG consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date the samples were received by the laboratory. The analyses performed are discussed in Section 2.5.1.

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

The validated data for Subarea 5A samples are usable as reported with the exception of one hexavalent chromium rejected result and one rejected SVOC result. This equates to 0.0127 percent of the results.

The validated data for Phase 3 Subarea 5A samples are usable as reported with the exception of the rejected data. These rejected results do not impact project objectives and goals. Specific details are provided in the validation reports in Appendix C and Section 4.7 of this report.

4.2 Data Validation Procedures

Data were validated by the independent data validation firm Laboratory Data Consultants, Inc. All data validation was conducted in accordance with the following guidance documents:

- *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004)
- *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008)
- *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005)

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

Table 4-1 presents all SDGs that include Subarea 5A soil samples and those SDGs that were validated as Level III or Level IV. Some SDGs may contain samples from other subareas, but all samples in an SDG were validated together. An index of samples associated with each SDG is presented at the beginning of Appendix C.

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

Subarea 5A SDGs		
Sample Delivery Group	Level of Validation Performed	CDM Smith Review
PH041	Level III	
PH042	Level III	
PH043	Level III	
PH044	Level III	
PH047	Level III	Yes
PH050	Level III	
PH051	Level III	
PH052	Level III	
PH053	Level IV	
PH054	Level IV	Yes
PH055	Level IV	
PH056	Level III	
PH057	Level IV	
PH058	Level III	
PH059	Level III	
PH060	Level III	
PH061	Level III	
PH077	Level III	
PH079	Level III	
PH125	Level III	
PH126	Level IV	
PH128	Level III	
PH129	Level III	
PH131	Level III	
PH132	Level III	
PH133	Level III	
PH134	Level IV	Yes
PH135	Level IV	
PH136	Level III	

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

To evaluate the quality of the laboratory data and the validation process, CDM Smith's chemists reviewed over 10 percent of the Subarea 5A soil sample SDGs. The SDGs reviewed are chosen based

on methods and level of validation performed by the validation firm. The purpose of the review was to identify any laboratory QC issues not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM Smith's review. The results of this review are provided in Section 4.9.

4.3 Quality Assurance Objectives

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

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

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

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

4.4 Summary of Field and Laboratory QA Activities

CDM Smith completed sampling activities in Subarea 5A in accordance with the approved Master FSP (CDM Smith 2012a) and Addendum to the Master FSP (CDM Smith 2012b) except for the surface samples that were collected using the subsurface procedure as discussed in Section 2.7. A total of 200 soil samples were collected in Subarea 5A and analyzed from the locations described in Table 2-1. Table 2-1 also provides a summary of the samples collected and the laboratory analyses requested. Associated QA activities are described below.

4.5 Field QA/QC

The MS/MSDs and field duplicates field QC samples were collected at a frequency of approximately 1 per 20 samples (five percent). During sampling in Subarea 5A, a total of 16 field duplicate/MS/MSD samples were collected equating to approximately eight percent. On an individual method basis, the five percent goal was met or exceeded for all analyses. Field duplicate and MS/MSD samples met the frequency requirements detailed in the Master FSP (CDM Smith 2012a).

Equipment Rinsate and Field Blanks

The 16 equipment rinsate blank results collected are presented in Appendix C and a summary of the detected results is presented in Table 4-2 for Subarea 5A. Field blank samples were collected from each lot number of ASTM International Type II water used for decontamination. Two field blanks were collected during sampling in Subarea 5A. Some of the field blanks were also collected during prior sampling events but are associated with samples collected in Subarea 5A. They are listed in Table 4-2

below. The detected results are presented below in Table 4-3 and all results are reported in Appendix C.

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

EB-052913 5A-DG-EB 05/29/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.27/1.1	J
Di-n-butylphthalate	µg/L	0.17/1.1	J
Manganese	mg/L	0.0013/0.01	J
Naphthalene	µg/L	0.033/0.055	J
EB-053013 5A_DG_EB 05/30/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.15/1	J
Di-n-butylphthalate	µg/L	0.18/1	J
EB1-060513 5A_DG_EB 06/05/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	1.12/9.84	J
2,3,7,8-TCDD	pg/L	0.532/1.97	J
2-Methylnaphthalene	µg/L	0.015/0.051	J
Barium	mg/L	0.00045/0.01	J
Bis(2-ethylhexyl)phthalate	µg/L	0.087/1	J
Di-n-butylphthalate	µg/L	0.11/1	J
Naphthalene	µg/L	0.085/0.051	
EB2-060513 5A_DG_EB 06/05/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	0.757/9.86	J
1-Methylnaphthalene	µg/L	0.012/0.05	J
2,3,7,8-TCDD	pg/L	0.67/1.97	J
2,3,7,8-Tetrachlorodibenzofuran	pg/L	0.188/1.97	J
2-Methylnaphthalene	µg/L	0.016/0.05	J
Bis(2-ethylhexyl)phthalate	µg/L	0.12/1.1	J
Di-n-butylphthalate	µg/L	0.11/1.1	J
Naphthalene	µg/L	0.086/0.05	

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

EB1-061213 5A_DG_EB 06/12/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,3,7,8-TCDD	pg/L	0.229/1.96	J
Benzo(g,h,i)perylene	µg/L	0.014/0.06	J
Di-n-butylphthalate	µg/L	0.11/1.1	J
Naphthalene	µg/L	0.056/0.06	
EB2-061213 5A_DG_EB 06/12/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Di-n-butylphthalate	µg/L	0.13/1	J
Naphthalene	µg/L	0.054/0.051	
Silver	mg/L	0.00062/0.001	J
Strontium	mg/L	0.00053/0.002	J
EB1-061913 5A_DG_EB 06/19/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2-Methylnaphthalene	µg/L	0.011/0.053	J
Diethylphthalate	µg/L	0.16/1.1	J
Di-n-butylphthalate	µg/L	0.17/1.1	J
Naphthalene	µg/L	0.058/0.053	
Tin	mg/L	0.0031/0.04	J
EB2-061913 5A_DG_EB 06/19/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,3,7,8-Tetrachlorodibenzofuran	pg/L	0.25/1.94	J
2-Methylnaphthalene	µg/L	0.011/0.05	J
Diethylphthalate	µg/L	0.15/1	J
Di-n-butylphthalate	µg/L	0.17/1	J
Naphthalene	µg/L	0.057/0.05	
EB-073013 5A_DG_EB 07/30/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
2,3,7,8-TCDD	pg/L	0.409/1.97	J
Barium	mg/L	0.00042/0.01	J
Diethylphthalate	µg/L	0.4/1	J
Molybdenum	mg/L	0.0034/0.02	J
Zinc	mg/L	0.0027/0.04	J

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

EB-111413 5A_DG_EB 11/14/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,6,7,8-Hexachlorodibenzoo-p-Dioxin	pg/L	0.578/9.78	J
2,3,7,8-Tetrachlorodibenzofuran	pg/L	0.366/1.96	J
Beta-Bhc	µg/L	0.0037/0.008	J
EB-111913 5A_DG_EB 11/19/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
Diethylphthalate	µg/L	0.26/1.1	J
EB1-112613 5A_DG_EB 11/26/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	0.438/11.1	J
1-Methylnaphthalene	µg/L	0.01/0.05	J
2,3,7,8-TCDD	pg/L	0.702/2.23	J
2-Methylnaphthalene	µg/L	0.012/0.05	J
Diethylphthalate	µg/L	0.44/1	J
Di-n-butylphthalate	µg/L	0.24/1	J
Naphthalene	µg/L	0.031/0.05	J
EB2-112613 5A_DG_EB 11/26/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	pg/L	0.622/10.6	J
2,3,7,8-TCDD	pg/L	0.739/2.12	J
2-Methylnaphthalene	µg/L	0.011/0.055	J
Diethylphthalate	µg/L	0.35/1.1	J
Nickel	mg/L	0.0018/0.02	J
Potassium	mg/L	0.109/1	J
EB2-112613 5A_DG_EB 11/26/2013			
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.36/11.3	J

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

EB2-120313 5A_DG_EB 12/03/2013			
Benzo(b)fluoranthene	µg/L	0.012/0.05	J
Benzo(g,h,i)perylene	µg/L	0.059/0.05	
Benzo(k)fluoranthene	µg/L	0.011/0.05	J
Dibenzo(a,h)anthracene	µg/L	0.059/0.05	
Diethylphthalate	µg/L	0.49/1	J
Di-n-butylphthalate	µg/L	0.18/1	J
Indeno(1,2,3-cd)pyrene	µg/L	0.054/0.05	

Notes:
Blank result greater than RL
BHC = benzene hexachloride
EFH = extractable fuel hydrocarbons
HxCDF = hexachlorodibenzofuran
RL = Reporting Limit
TCDD = 2,3,7,8-tetrachlorodibenzo-p-dioxin
µg/L = microgram per liter
pg/L = picogram per liter
mg/L = milligram per liter
J = estimated value

Table 4-3 Field Blank Results for Subarea 5A Soil Samples – Detected Results Only

FB-041113 Field Blank 04/11/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	pg/L	0.125/9.76	J
1-Methylnaphthalene	µg/L	0.019/0.051	J
2-Methylnapthalene	µg/L	0.024/0.051	J
Diethylphthalate	µg/L	0.18/1	J
Di-n-butylphthalate	µg/L	0.17/1	J
Methylene Chloride	µg/L	2/5	J
Naphthalene (8270D SIM)	µg/L	0.17/0.051	
Naphthalene (8270D)	µg/L	0.2/0.5	
FB-041613 Field Blank 04/16/2013			
Analyte	**Units**	**Concentration/RL**	**Final Qualifier**
1,2,3,7,8-HxCDF	pg/L	0.257/9.71	J
2-Methylnaphthalene	µg/L	0.012/0.052	J
Chloroform	µg/L	3/5	J

Table 4-3 Field Blank Results for Subarea 5A Soil Samples – Detected Results Only

FB-041613 Field Blank 04/16/2013			
Di-n-butylphthalate	µg/L	0.11/1	J
Methylene Chloride	µg/L	18/5	
Tin	mg/L	0.0029/0.04	J

Notes:
Blank result greater than RL
EFH = extractable fuel hydrocarbons
HxCDF = hexachlorodibenzofuran
RL = Reporting Limit
µg/L = microgram per liter
pg/L = picogram per liter
mg/L = milligram per liter
J = estimated value

Trip Blanks

Twenty-two trip blank samples were shipped with the Subarea 5A samples. The analytical results for the trip blanks collected in association with Subarea 5A are presented in Appendix C. All trip blank results were nondetect.

Temperature Blanks

Temperature blanks were included with each shipment of samples. Based on validation results all temperature blanks submitted with the Subarea 5A samples met criteria.

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

Field QC Summary

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

4.6 Laboratory QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in Appendix C. Outliers were appropriately qualified. For Subarea 5A one hexavalent chromium result and one SVOC result were rejected. Specific details are provided in the validation reports in Appendix C and discussed in Section 4.7.

4.7 Data Quality Indicators

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

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

4.7.1 Precision

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4.7.2 Accuracy

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

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

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

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

- Sampling procedure
- Field contamination

- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

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

The following QC samples are used to assess laboratory accuracy:

- Matrix Spikes: MSs are samples with a known amount of a target analyte added to them. Analysis of the sample that has been spiked and comparison with the results from the unspiked sample (background) gives information about the ability of the test procedure to generate a correct result from the sample.
- Post Digestion Spikes: Post digestion spikes are performed after the sample has been prepared and is ready for analysis. These are also termed "analytical spikes." The technique is used in conjunction with a MS to provide data that can separate interferences produced as part of the sample preparation from interferences that are innate qualities of the sample.
- Laboratory Control Samples: LCSs consist of a portion of analyte-free water or solid phase sample that is spiked with target analytes at a known concentration.
- Surrogates: Surrogate recovery is a QC measure limited to use in organics analysis. Surrogates are compounds added to every sample at the beginning of the sample preparation to monitor the success of the sample preparation and analytical procedures on an individual sample basis. Individual compounds used as surrogates are selected based on their ability to mimic the behavior of specific target analytes held to be particularly sensitive to the sample preparation manipulations.
- Interference Check Samples: Interference check sample analysis is a QC measure unique to metals analysis using inductively coupled plasma atomic emission spectrometry. This QC sample verifies the analytical instrument's ability to overcome interferences typical of those found in samples.
- Calibrations: Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing calibrations demonstrate that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.
- Internal Standards: Internal standards measure the gas chromatograph/ mass spectrometer sensitivity and response stability during each analysis.
- Serial Dilution: Serial dilutions are performed on at least one sample from every batch of analyses for metals to determine if physical or chemical interferences exist in the analyte determinations.

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

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

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

- Some of the dioxins and one alcohol rest due to confirmation column results
- Some of the metal analyte results due to serial dilutions
- Some of the PCBs, SVOCs, and SVOC SIM results due to calibration results
- Some of the SVOC SIM results due to internal standards
- Some of the pesticide and SVOC SIM results due to LCSs
- Some of the dioxins, metals, hexavalent chromium, TPH-EFH, TPH-GRO, pesticides, VOCs, and SVOC SIM results due to MSs
- Some of the TPH-EFH, TPH-GRO and VOC SIM results due to surrogates

The following individual Subarea 5A analyte results were rejected "R" based on accuracy criteria:

- One hexavalent chromium result based on MSs
- One SVOC (benzidine) result based on MSs

Sample preservation, handling, and holding times are additional measures of accuracy of the data. Holding times are defined as the amount of time that elapses from collection of the sample in the field to the start of the analysis. Preservation is defined as techniques used to maintain the target analytes at concentrations representative of the source sampled. Published holding times are viewed as valid as long as the associated preservation and container requirements have been met. All holding times, sample preservation and handling criteria were met except for one formaldehyde result.

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

4.7.3 Blank Contamination

Blanks are used to determine the level of laboratory and field contamination introduced into the samples, independent of the level of target analytes found in the sample source. Sources of sample contamination can include the containers and equipment used to collect the sample, preservatives added to the sample, other samples in transport coolers and laboratory sample storage refrigerators, standards and solutions used to calibrate instruments, glassware and reagents used to process

samples, airborne contamination in the laboratory preparation area and the analytical instrument sample introduction equipment. Each analyte group has its own particular suite of common laboratory contaminants. Active measures must be performed to continually measure the ambient contamination level and steps taken to discover the source of the contamination to eliminate or minimize the levels. Random spot contamination can also occur from analytes that are not common laboratory problems but that can arise as a problem for a specific project or over a short period of time. Sample equipment decontamination practices are discussed in Section 2.4.4. Field blanks, equipment blanks, trip blanks and laboratory method blanks are analyzed to identify possible sources of contamination. The DUAR and laboratory validation reports in Appendix C discuss the results that were qualified based on field and laboratory blank contamination.

In summary, for Phase 3 Subarea 5A samples, some dioxins and metals were qualified as non-detect due to laboratory blank contamination criteria. The percentage of results qualified as non-detect based on laboratory blank contamination was less than 5.6 percent for metals and 39 percent for dioxins. These results were qualified as nondetect "U" due to laboratory blank contamination.

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

Tables 4-2 and 4-3 provide a summary of analytes observed in equipment blanks and field blanks. No analytes were detected in the trip blank samples. Most of the detected compounds in the equipment and field blanks were below the RLs but above the MDLs. Compounds detected above the RL are highlighted yellow in the associated tables. ASTM Type II water was used to generate the equipment and field blanks. The field blanks (source water) had detections of various analytes for SVOC SIM above the RLs indicating inherent low level contamination in the source water used.

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

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

For Subarea 5A, some metals and SVOC SIM results were qualified based on field/equipment blanks results. To date, chemical detections in equipment blank samples appear to be random occurrences.

4.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the Master FSP (CDM Smith 2012a) for this sampling event and future sampling events, sample analysis should yield

results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

4.7.4.1 Representativeness

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

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

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

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

4.7.4.2 Comparability

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

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

4.7.4.3 Sensitivity

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

Detection Limits

The MDL study attempts to answer the question, "What is the lowest level of analyte in a sample that will result in a signal different than zero"? The study is based upon repetitive analysis of an interference-free sample spiked with a known amount of the target analyte. The MDL is a measure of

the ability of the test procedure to generate a positive response for the target analyte in the absence of any other interferences from the sample.

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

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

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

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

4.8 Dioxin Data Quality and Usability

Dioxins and furans are compounds created as unintended by-products from several human activities as well as from natural causes such as forest fires. They are persistent environmental pollutants and have been shown to bioaccumulate in the environment. One main objective of dioxin analyses is attempting to detect very low concentrations of dioxins and furans. In the attempt to achieve this goal, all dioxin data was analyzed by EPA Method 1613B as discussed previously. As part of analyzing dioxins for this project, the laboratory was directed to report values that were determined to be estimated maximum possible concentrations (EMPC) values. EMPC values are characterized by a response with a signal to noise ratio of at least 2.5:1 for both of the quantitation ions, but do not meet the ion abundance ratio criteria.

An EMPC result indicates that there is the detected presence of a compound above detection level but it does not meet the appropriate QA/QC reporting level criteria to absolutely confirm whether that detected concentration is a dioxin compound identified by the analytical system. What it does indicate is a possible low level dioxin peak has been identified by the analytical instrument but its concentration level is marginally above detection level.

For the Subarea 5A dioxin analyses, Eurofins Lancaster Laboratory was directed to qualify any EMPC values with a “Q” qualifier in order to identify EMPC values for future evaluation. In the Appendix A tables, the “Q” qualified data identified by the laboratory indicating an EMPC value, has had the qualifier “J-EMPC” added to the final qualifier column to replace the laboratory “Q” qualifier. This is to aid the data user in identifying values that are EMPCs.

Also provided in the tables are description qualifiers that were applied during validation. These are in parenthesis and are only provided to aid the data user in determining why a result was qualified. These qualifiers are not considered final qualifiers and are for informational purposes only.

Because of the nature of dioxins and furans and the objective of achieving very low reporting limits, CDM Smith is identifying all EMPC values so specific data users can apply the various options of using EMPC data based on the end users goals and objectives. There is no industry standard guidance on how EMPC values are to be handled. Many EPA regions and states have their own rules when using EMPC values.

Another variable of dioxin analyses is the calculation of a toxicity equivalence (TEQ) for a sample. For a single dioxin compound, the TEQ is the product of the concentration of the dioxin compound in an environmental mixture and its corresponding toxicity equivalence factor (TEF). A TEF for a dioxin compound is a measure of the compound's toxicity relative to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). The total TEQ for the mixture is the sum of the individual TCDD TEQs across the dioxin compounds. The TCDD TEQ provides a means for determining the toxicity of a mixture of dioxin compounds in the absence of toxicity values for these dioxin compounds.

The dioxin data review policy as discussed in the EPA *Contract Laboratory Program National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review*, Office of Solid Waste and Emergency Response (OSWER) 9240.1-53, EPA-540-R-11-016 (EPA 2011), as well as the 2005 guidelines (EPA 2005), allows individual EPA regions flexibility in using criteria for calculating TEQ and how a data user can use EMPC results in this calculation.

In utilizing EMPC values in TEQ calculations, some data users change the value of the EMPC result to 0 when calculating TEQs. Other data users may use the result as is, not changing it to 0, and others still, will take half of the value.

In summary, in order to allow the data user to have as much information as possible from the analytical process for site data, all EMPC results have been qualified as "J-EMPC" as discussed previously so the data user can apply their chosen approach in addressing EMPC values in TEQ calculations.

4.9 Review of Selected Validation Reports

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

4.10 Data Completeness

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

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

Equation A.

$$\%Completeness = Cx\frac{100}{n}$$

Where:

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

Equation B.

$$\%Completeness = Vx\frac{100}{n'}$$

Where:

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

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

A total of 200 soil samples including the field duplicates were collected and analyzed. Some locations required only a subsurface sample while other locations required both a surface and a subsurface sample. The number of subsurface samples to be collected at each location was not pre-determined because the total depth of each boring varies depending on the local geology. The completeness goal for the actual number of samples collected compared to the number of samples planned is considered acceptable as a sample was collected from each location (depending on shallow refusal).

The completeness goal achieved for acceptable data was 99.99 percent for Subarea 5A for the number of measurements judged to be valid versus the total number of measurements made for all samples analyzed. Table 4-4 summarizes all results that were estimated or rejected for Phase 3 Subarea 5A respectively.

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

- Method 7199
  - One out of 12 hexavalent chromium results (0.0833 percent)
- Method 8270D
  - One out of 111 SVOC (benzidine) results (0.009 percent)

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

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins – 1613B	469	1,202	--	1,418	79	3,168	100
Metals - 6010C	2,696	1,202	--	457	169	4,524	100
Metals – 6020A	217	416	--	57	6	696	100
Perchlorate - 6850	--	--	--	2	--	2	100

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

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Hexavalent Chromium – 7199	1	9	1	1	--	12	91.7
Mercury – 7471B	25	65	--	84	--	174	100
Terphenyls – 8015B	--	2	--	12	1	15	100
Alcohols – 8015C	--	1	--	5	--	6	100
TPH-EFH/GRO – 8015M	172	91	--	679	6	948	100
Pesticides – 8081B	--	6	--	175	8	189	100
PCB/PCTs – 8082A	1	8	--	1,009	2	1,020	100
Herbicides – 8151A	--	--	--	10	--	10	100
VOCs – 8260B	4	1	--	301	2	308	100
VOC SIM – 8260B SIM	--	--	--	2	2	4	100
SVOC – 8270D	--	8	1	97	6	111	99.1
SVOC SIM – 8270D SIM	341	550	--	3,553	87	4.531	100
Formaldehyde – 8315A	2	--	--	7	1	10	100
Completeness Total for Phase 3 Subarea 5A Samples Collected and Judged Valid							**98.995**

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

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

4.11 Assessment of Data Usability and Reconciliation with Master FSP Goals

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

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

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

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

Section 5
References

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

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

Appendix A
Analytical Results Tables

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subarea 5A

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

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subarea 5A

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8330A	6629-29-4	2,4-Diamino-6-nitrotoluene	
8330A	78-11-5	Pentaerythritol Tetranitrate	
8330A	88-72-2	2-Nitrotoluene	
8330A	99-08-1	3-Nitrotoluene	
8330A	99-35-4	1,3,5-Trinitrobenzene	
8330A	99-99-0	4-Nitrotoluene	
8330A	121-14-2	2,4-Dinitrotoluene	
8330A	98-95-3	Nitrobenzene	
8330A	99-65-0	m-Dinitrobenzene	
8151A	120-36-5	Dichlorprop	
8151A	1918-00-9	Dicamba	
8151A	75-99-0	2,2-Dichlor-Propionic Acid	
8151A	88-85-7	Dinitrobutyl Phenol	
8151A	93-65-2	Methylchlorophenoxypropionic acid	MCPP
8151A	93-72-1	2,4,5-Trichlorophenoxyacetic acid	Silvex (2,4,5-TP)
8151A	93-76-5	2,4,5-Trichlorophenoxyacetic Acid	2,4,5-T
8151A	94-74-6	2-Methyl-4-Chlorophenoxyacetic Acid	MCPA
8151A	94-75-7	Dichlorophenoxyacetic Acid	2,4-D
8151A	94-82-6	4-(2,4-dichlorophenoxy)butanoic acid	2,4 DB
8081A	8001-35-2	Chlorinated Camphene	Toxaphene
8081A	1024-57-3	Heptachlor Epoxide	
8081A	1031-07-8	Endosulfan Sulfate	
8081A	2385-85-5	Mirex	
8081A	309-00-2	Aldrin	
8081A	319-84-6	Alpha-BHC	
8081A	319-85-7	Beta-BHC	
8081A	319-86-8	Delta-BHC	
8081A	33213-65-9	Endosulfan II	
8081A	50-29-3	4,4'-DDT	
8081A	53494-70-5	Endrin Ketone	
8081A	57-74-9	Chlordane	
8081A	58-89-9	Gamma-BHC (Lindane)	
8081A	60-57-1	Dieldrin	
8081A	72-20-8	Endrin	
8081A	72-43-5	Methoxychlor	
8081A	72-54-8	4,4'-DDD	
8081A	72-55-9	4,4'-DDE	
8081A	7421-93-4	Endrin Aldehyde	
8081A	76-44-8	Heptachlor	
8081A	959-98-8	Endosulfan I	
1613B	1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	2,3,7,8-TCDD
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1,2,3,7,8,9-HxCDD
1613B	3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	OCDD
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1,2,3,4,6,7,8-HpCDD
1613B	39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	OCDF
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,4,7,8-HxCDD
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1,2,3,7,8-PeCDD
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF
1613B	55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF
1613B	57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF
1613B	57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,6,7,8-HxCDD
1613B	60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF
1613B	67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF
1613B	70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF
1613B	72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF
8082	11096-82-5	Aroclor 1260	
8082	11097-69-1	Aroclor 1254	
8082	11100-14-4	Aroclor 1268	
8082	11104-28-2	Aroclor 1221	

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subarea 5A

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8082	11126-42-4	Aroclor 5460	
8082	11141-16-5	Aroclor 1232	
8082	12642-23-8	Aroclor 5442	
8082	12672-29-6	Aroclor 1248	
8082	12674-11-2	Aroclor 1016	
8082	37324-23-5	Aroclor 1262	
8082	53469-21-9	Aroclor 1242	
8082	63496-31-1	Aroclor 5432	
1625C	62-75-9	N-Nitrosodimethylamine	
8270C SIM	62-75-9	N-Nitrosodimethylamine	
8270C	121-14-2	2,4-Dinitrotoluene	
8270C	98-95-3	Nitrobenzene	
8270C	106-46-7	1,4-Dichlorobenzene	
8270C	120-82-1	1,2,4-Trichlorobenzene	
8270C	541-73-1	1,3-Dichlorobenzene	
8270C	87-68-3	Hexachlorobutadiene	
8270C	95-50-1	1,2-Dichlorobenzene	
8270C	100-01-6	4-Nitroaniline	
8270C	100-02-7	4-Nitrophenol	
8270C	101-55-3	4-Bromophenyl Phenyl Ether	
8270C	105-67-9	2,4-Dimethylphenol	
8270C	106-44-5	4-Methylphenol	
8270C	106-47-8	4-Chloroaniline	
8270C	108-68-9	3,5-Dimethylphenol	
8270C	108-95-2	Phenol	
8270C	111-44-4	Bis(2-Chloroethyl) ether	
8270C	111-91-1	Bis(2-Chloroethoxy) methane	
8270C	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C SIM	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C	117-84-0	Di-N-Octyl Phthalate	
8270C SIM	117-84-0	Di-N-Octyl Phthalate	
8270C	118-74-1	Hexachlorobenzene	
8270C SIM	120-12-7	Anthracene	
8270C	120-83-2	2,4-Dichlorophenol	
8270C	122-66-7	1,2-Diphenylhydrazine	
8270C	129-00-0	Pyrene	
8270C SIM	129-00-0	Pyrene	
8270C	131-11-3	Dimethylphthalate	
8270C SIM	131-11-3	Dimethylphthalate	
8270C	132-64-9	Dibenzofuran	
8270C	191-24-2	Benzo(g,h,i)perylene	
8270C SIM	191-24-2	Benzo(g,h,i)perylene	
8270C	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C SIM	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C	205-99-2	Benzo(b)fluoranthene	
8270C SIM	205-99-2	Benzo(b)fluoranthene	
8270C	206-44-0	Fluoranthene	
8270C SIM	206-44-0	Fluoranthene	
8270C	207-08-9	Benzo(k)fluoranthene	
8270C SIM	207-08-9	Benzo(k)fluoranthene	
8270C SIM	208-96-8	Acenaphthylene	
8270C	218-01-9	Chrysene	
8270C SIM	218-01-9	Chrysene	
8270C	39638-32-9	bis(2-Chloroisopropyl) ether	
8270C	50-32-8	Benzo(a)pyrene	
8270C SIM	50-32-8	Benzo(a)pyrene	
8270C	51-28-5	2,4-Dinitrophenol	
8270C	534-52-1	4,6-Dinitro-2-Methylphenol	
8270C	53-70-3	Dibenzo(a,h)anthracene	
8270C SIM	53-70-3	Dibenzo(a,h)anthracene	
8270C	56-55-3	Benzo(a)anthracene	

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subarea 5A

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8270C SIM	56-55-3	Benzo(a)anthracene	
8270C	59-50-7	4-Chloro-3-Methylphenol	
8270C	621-64-7	N-Nitroso-Di-N-Propylamine	
8270C	62-53-3	Aniline	
8270C	65-85-0	Benzoic Acid	
8270C	67-72-1	Hexachloroethane	
8270C	7005-72-3	4-Chlorophenyl Phenylether	
8270C	77-47-4	Hexachlorocyclopentadiene	
8270C	78-59-1	Isophorone	
8270C SIM	83-32-9	Acenaphthene	
8270C	84-66-2	Diethylphthalate	
8270C SIM	84-66-2	Diethylphthalate	
8270C	84-74-2	Di-N-Butylphthalate	
8270C SIM	84-74-2	Di-N-Butylphthalate	
8270C	85-01-8	Phenanthrene	
8270C SIM	85-01-8	Phenanthrene	
8270C	85-68-7	Butylbenzylphthalate	
8270C SIM	85-68-7	Butylbenzylphthalate	
8270C	86-30-6	N-Nitrosodiphenylamine	
8270C SIM	86-73-7	Fluorene	
8270C	86-74-8	Carbazole	
8270C	87-86-5	Pentachlorophenol	
8270C	88-06-2	2,4,6-Trichlorophenol	
8270C	88-74-4	2-Nitroaniline	
8270C	88-75-5	2-Nitrophenol	
8270C	90-12-0	1-Methylnaphthalene	
8270C SIM	90-12-0	1-Methylnaphthalene	
8270C	91-20-3	Naphthalene	
8270C SIM	91-20-3	Naphthalene	
8270C	91-57-6	2-Methylnaphthalene	
8270C SIM	91-57-6	2-Methylnaphthalene	
8270C	91-58-7	2-Chloronaphthalene	
8270C	91-94-1	3,3`-Dichlorobenzidine	
8270C	92-87-5	Benzidine	
8270C	95-48-7	2-Methylphenol	
8270C	95-57-8	2-Chlorophenol	
8270C	95-95-4	2,4,5-Trichlorophenol	
8270C	99-09-2	3-Nitroaniline	
8270C	100-51-6	Benzyl Alcohol	
8270C	606-20-2	2,6-Dinitrotoluene	
8015B	GROC5C12	Gasoline Range Organices (C5-C12)	GRO (C5-C12)
8015B	PHCC15C20	Extractable Fuel Hydrocarbons (C15-C20)	EFH (C15-C20)
8015B	PHCC21C30	Extractable Fuel Hydrocarbons (C21-C30)	EFH (C21-C30)
8015B	PHCC30C40	Extractable Fuel Hydrocarbons (C30-C40)	EFH (C30-C40)
8015B	PHCC8C11	Extractable Fuel Hydrocarbons (C8-C11)	EFH (C8-C11)
8260B	106-46-7	1,4-Dichlorobenzene	
8260B	120-82-1	1,2,4-Trichlorobenzene	
8260B	541-73-1	1,3-Dichlorobenzene	
8260B	87-68-3	Hexachlorobutadiene	
8260B	95-50-1	1,2-Dichlorobenzene	
8260B	99-87-6	Isopropyltoluene	
8260B	100-41-4	Ethylbenzene	
8260B	100-42-5	Styrene	
8260B	10061-01-5	cis-1,3-Dichloropropene	
8260B	10061-02-6	trans-1,3-Dichloropropene	
8260B	103-65-1	N-Propylbenzene	
8260B	104-51-8	N-Butylbenzene	
8260B	106-43-4	4-Chlorotoluene	
8260B	106-93-4	1,2-Dibromoethane	
8260B	107-06-2	1,2-Dichloroethane	
8260B	108-10-1	4-Methyl-2-Pentanone	

Appendix A1
General Analytical Methods, CAS Number and Chemical Name
Subarea 5A

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8260B	108-67-8	1,3,5-Trimethylbenzene	
8260B	108-86-1	Bromobenzene	
8260B	108-88-3	Toluene	
8260B	108-90-7	Chlorobenzene	
8260B	110-75-8	2-Chloroethyl Vinyl Ether	
8260B SIM	123-91-1	1,4-Dioxane	
8260B	124-48-1	Dibromochloromethane	
8260B	127-18-4	Tetrachloroethene	
8260B	135-98-8	sec-Butylbenzene	
8260B	142-28-9	1,3-Dichloropropane	
8260B	156-59-2	cis-1,2-Dichloroethene	
8260B	156-60-5	trans-1,2-Dichloroethene	
8260B	1634-04-4	Methyl tert-Butyl Ether	
8260B	179601-23-1	m,p-Xylene	
8260B	56-23-5	Carbon tetrachloride	
8260B	563-58-6	1,1-Dichloropropene	
8260B	591-78-6	2-Hexanone	
8260B	594-20-7	2,2-Dichloropropane	
8260B	630-20-6	1,1,1,2-Tetrachloroethane	
8260B	67-64-1	Acetone	
8260B	67-66-3	Chloroform	
8260B	71-43-2	Benzene	
8260B	71-55-6	1,1,1-Trichloroethane	
8260B	74-83-9	Bromomethane	
8260B	74-87-3	Chloromethane	
8260B	74-95-3	Dibromomethane	
8260B	74-97-5	Bromochloromethane	
8260B	75-00-3	Chloroethane	
8260B	75-01-4	Vinyl Chloride	
8260B	75-09-2	Methylene chloride	
8260B	75-25-2	Bromoform	
8260B	75-27-4	Bromodichloromethane	
8260B	75-34-3	1,1-Dichloroethane	
8260B	75-35-4	1,1-Dichloroethene	
8260B	75-69-4	Trichlorofluoromethane	
8260B	75-71-8	Dichlorodifluoromethane	
8260B	75-88-7	1,1,1-Trichloro-2,2,2-trifluoroethane	Freon 113a
8260B	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	Freon 113
8260B	78-87-5	1,2-Dichloropropane	
8260B	78-93-3	2-Butanone	
8260B	79-00-5	1,1,2-Trichloroethane	
8260B	79-01-6	Trichloroethene	
8260B	79-34-5	1,1,2,2-Tetrachloroethane	
8260B	79-38-9	Chlorotrifluoroethene	
8260B	87-61-6	1,2,3-Trichlorobenzene	
8260B	95-47-6	o-Xylene	
8260B	95-49-8	2-Chlorotoluene	
8260B	95-63-6	1,2,4-Trimethylbenzene	
8260B	96-12-8	1,2-Dibromo-3-chloropropane	
8260B	96-18-4	1,2,3-Trichloropropane	
8260B	98-06-6	tert-Butylbenzene	
8260B	98-82-8	Isopropylbenzene	

SSFL Main Qualification Definitions and Notes

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

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

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

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

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

SSFL Specific Qualification Definitions

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

			Sample Name	SL-518-SA5A-SB-7.0-8.0	SL-518-SA5A-SB-10.0-11.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0
			Sample Type	N	N	N	FD	N
			Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013
			SDG	PH132	PH132	PH129	PH129	PH129
			Start Depth	7	10	11	11	14
			End Depth	8	11	12	12	15
Analytic Method	CAS Number	Chemical Name	Unit					
8260B SIM	123-91-1	1,4-Dioxane	µg/kg	18 UJ S	15 UJ S	15 U	16 U	17 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5
			Sample Type	N	FD	N
			Sample Date	11/12/2013	11/12/2013	11/12/2013
			SDG	PH126	PH126	PH126
			Start Depth	0	0	6.5
			End Depth	0.5	0.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit			
8015C	64-17-5	Ethanol	µg/kg	1000 U	1000 U	1100 U
8015C	67-56-1	Methanol	µg/kg	480 J FD, Z, *#	1000 UJ FD	1100 U
8015C	67-63-0	2-Propanol	µg/kg	1000 U	1000 U	1100 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-508-SA5A-SB-0.0-0.5		SL-508-SA5A-SB-4.0-5.0		SL-508-SA5A-SB-9.0-10.0		SL-508-SA5A-SB-17.0-18.0		SL-508-SA5A-SB-21.0-22.0		SL-508-SA5A-SB-33.0-34.0		SL-518-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	11/14/2013		11/14/2013		11/14/2013		11/14/2013		11/14/2013		11/14/2013		11/19/2013	
			SDG	PH129		PH129		PH129		PH129		PH129		PH129		PH132	
			Start Depth	0		4		9		17		21		33		0	
			End Depth	0.5		5		10		18		22		34		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06	U	1.07	U	0.233	J-EMPC J (Z)	1.08	U	1.07	U	0.131	J-EMPC J (Z)	0.0659	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.29	U (B)	5.33	J-EMPC U (B)	5.44	J-EMPC U (B)	5.39	J-EMPC U (B)	5.37	J-EMPC U (B)	5.64	J-EMPC U (B)	0.42	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	25.3		12.3		3.82	J-EMPC J (Z)	50.1		7.7	J (Z)	8.57	J (Z)	269	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	2.71	J (Z)	1.47	J (Z)	0.523	J-EMPC J (Z)	2.81	J (Z)	1.02	J-EMPC J (Z)	1.26	J (Z)	24.7	
1613B	39001-02-0	OCDF	ng/kg	10.6	J-EMPC U (B)	10.7	U (B)	10.9	U (B)	10.8	U (B)	10.7	J-EMPC U (B)	11.3	U (B)	22.1	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.29	J-EMPC U (B)	5.33	U (B)	5.44	J-EMPC U (B)	5.39	J-EMPC U (B)	5.37	U (B)	5.64	J-EMPC U (B)	5.17	U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.29	U (B)	5.33	J-EMPC U (B)	0.447	J (Z)	5.39	U	5.37	J-EMPC U (B)	5.64	U (B)	5.17	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.06	U	0.087	J (Z)	0.204	J-EMPC J (Z)	1.08	U	1.07	U	1.13	U	1.03	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	U	5.39	J-EMPC U (B)	5.37	J-EMPC U (B)	5.64	J-EMPC U (B)	0.29	J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	U (B)	5.39	J-EMPC U (B)	5.37	U (B)	5.64	J-EMPC U (B)	5.17	U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	J-EMPC U (B)	5.39	J-EMPC U (B)	5.37	J-EMPC U (B)	5.64	J-EMPC U (B)	5.17	U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.29	U (B)	0.3	J (Z)	5.44	U (B)	5.39	J-EMPC U (B)	5.37	J-EMPC U (B)	5.64	U	5.17	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	J-EMPC U (B)	5.39	U (B)	5.37	J-EMPC U (B)	5.64	U	0.755	J-EMPC J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	J-EMPC U (B)	5.39	U (B)	5.37	J-EMPC U (B)	5.64	J-EMPC U (B)	5.17	U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.47	J (Z)	0.387	J (Z)	0.477	J-EMPC J (Z)	0.643	J (Z)	5.37	U (B)	5.64	U (B)	4.71	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.29	J-EMPC U (B)	5.33	J-EMPC U (B)	5.44	J-EMPC U (B)	5.39	U (B)	5.37	J-EMPC U (B)	5.64	U (B)	5.17	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.29	J-EMPC U (B)	5.33	U	5.44	J-EMPC U (B)	5.39	U (B)	5.37	J-EMPC U (B)	5.64	U (B)	5.17	U (B)

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
J-EMPC – Estimated Maximum Possible Concentration
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-518-SA5A-SB-7.0-8.0		SL-518-SA5A-SB-10.0-11.0		SL-518-SA5A-SB-15.0-16.0		SL-521-SA5A-SB-0.0-0.5		SL-521-SA5A-SB-9.0-10.0		SL-521-SA5A-SB-11.0-12.0		SL-821-SA5A-SB-11.0-12.0	
			Sample Type	N		N		N		N		N		N		FD	
			Sample Date	11/19/2013		11/19/2013		11/19/2013		11/14/2013		11/14/2013		11/14/2013		11/14/2013	
			SDG	PH132		PH132		PH132		PH129		PH129		PH129		PH129	
			Start Depth	7		10		15		0		9		11		11	
			End Depth	8		11		16		0.5		10		12		12	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.1	U	2.24	U	1.13	U	0.0583	J-EMPC J (Z)	0.138	J-EMPC J (Z)	1.06	UJ (FD)	0.107	J-EMPC J (FD, Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.48	J-EMPC U (B)	0.49	J (Z)	5.64	U (B)	0.406	J (Z)	5.37	J-EMPC U (B)	0.409	J-EMPC J (Z)	0.398	J (Z)
1613B	3268-87-9	OCDD	ng/kg	4.74	J (Z)	7.55	J (Z)	11.3	J-EMPC U (B)	605		21.9		2.27	J (Z)	1.55	J (Z)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.727	J-EMPC J (Z)	1.06	J (Z)	5.64	J-EMPC U (B)	49.4		3.03	J (Z)	5.31	U (B)	5.34	U (B)
1613B	39001-02-0	OCDF	ng/kg	11	J-EMPC U (B)	0.789	J (Z)	11.3	U (B)	3.38	J (Z)	10.7	J-EMPC U (B)	10.6	U (B)	10.7	U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.48	J-EMPC U (B)	11.2	J-EMPC U (B)	5.64	J-EMPC U (B)	5.28	J-EMPC U (B)	5.37	U	5.31	J-EMPC UJ (B, FD)	5.34	J-EMPC UJ (B, FD)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.48	J-EMPC U (B)	11.2	J-EMPC U (B)	5.64	J-EMPC U (B)	5.28	U (B)	5.37	J-EMPC U (B)	5.31	J-EMPC UJ (B, FD)	5.34	UJ (B, FD)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.1	U	2.24	U	1.13	U	0.0723	J-EMPC J (Z)	1.07	U	0.0626	J (Z)	0.0519	J-EMPC J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.48	J-EMPC U (B)	11.2	J-EMPC U (B)	5.64	U (B)	5.28	U (B)	5.37	J-EMPC U (B)	5.31	J-EMPC UJ (B, FD)	5.34	UJ (B, FD)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.48	U (B)	11.2	J-EMPC U (B)	5.64	J-EMPC U (B)	5.28	J-EMPC U (B)	5.37	J-EMPC U (B)	5.31	J-EMPC UJ (B, FD)	5.34	J-EMPC UJ (B, FD)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.48	J-EMPC U (B)	11.2	J-EMPC U (B)	5.64	U (B)	1.26	J-EMPC J (Z)	5.37	J-EMPC U (B)	5.31	J-EMPC UJ (B, FD)	5.34	J-EMPC UJ (B, FD)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.48	U (B)	11.2	J-EMPC U (B)	5.64	J-EMPC U (B)	0.255	J-EMPC J (Z)	5.37	U (B)	5.31	J-EMPC UJ (B, FD)	0.256	J-EMPC J (FD, Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.48	J-EMPC U (B)	0.335	J-EMPC J (Z)	5.64	J-EMPC U (B)	0.708	J-EMPC J (Z)	5.37	J-EMPC U (B)	5.31	J-EMPC U (B)	5.34	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.48	J-EMPC U (B)	11.2	U (B)	5.64	J-EMPC U (B)	5.28	U (B)	5.37	U (B)	5.31	J-EMPC UJ (B, FD)	5.34	UJ (B, FD)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.48	U (B)	0.255	J-EMPC J (Z)	5.64	J-EMPC U (B)	1.51	J (Z)	0.385	J-EMPC J (Z)	5.31	J-EMPC U (B)	5.34	U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.48	J-EMPC U (B)	11.2	J-EMPC U (B)	5.64	J-EMPC U (B)	5.28	J-EMPC U (B)	5.37	J-EMPC U (B)	5.31	UJ (B, FD)	5.34	UJ (B, FD)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.48	J-EMPC U (B)	0.485	J (Z)	5.64	J-EMPC U (B)	5.28	J-EMPC U (B)	5.37	J-EMPC U (B)	5.31	J-EMPC U (B)	5.34	U (B)

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			Sample Name	SL-521-SA5A-SB-14.0-15.0		SL-584-SA5A-SB-0.0-0.5		SL-596-SA5A-SB-0.0-0.5		SL-596-SA5A-SB-4.0-5.0		SL-616-SA5A-SB-0.0-0.5		SL-628-SA5A-SB-0.0-0.5		SL-928-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		FD	
			Sample Date	11/14/2013		11/25/2013		11/19/2013		11/19/2013		12/02/2013		11/12/2013		11/12/2013	
			SDG	PH129		PH134		PH132		PH132		PH136		PH126		PH126	
			Start Depth	14		0		0		4		0		0		0	
			End Depth	15		0.5		0.5		5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.109	J-EMPC J (Z)	1.02	U	1.05	U	1.08	U	1.02	U	0.99	J-EMPC UJ (B, FD)	0.992	J-EMPC UJ (B, FD)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.43	J-EMPC U (B)	0.637	J (Z)	0.559	J (Z)	5.4	J-EMPC U (B)	0.33	J-EMPC J (Z)	0.654	J (Z)	0.746	J (Z)
1613B	3268-87-9	OCDD	ng/kg	8.66	J (Z)	857		243		5.02	J (Z)	180		297	J (Q)	186	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.971	J-EMPC J (Z)	41.6		16.6		0.675	J-EMPC J (Z)	15.6		30.8	J (FD, Q)	13.9	J (FD)
1613B	39001-02-0	OCDF	ng/kg	10.9	J-EMPC U (B)	24.7		4.44	J (Z)	10.8	J-EMPC U (B)	5.59	J (Z)	8.55	J (FD, Z)	4.35	J (FD, Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.43	U (B)	5.12	J-EMPC U (B)	5.26	U (B)	5.4	J-EMPC U (B)	0.143	J-EMPC J (Z)	0.327	J (FD, Z)	0.574	J (FD, Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.43	J-EMPC U (B)	5.12	J-EMPC U (B)	5.26	U (B)	5.4	J-EMPC U (B)	0.12	J-EMPC J (Z)	4.95	J-EMPC UJ (B, FD)	0.86	J-EMPC J (FD, Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.09	U	0.121	J (Z)	1.05	U	0.0935	J-EMPC J (Z)	1.02	U	0.99	UJ (FD)	0.355	J (FD, Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.43	J-EMPC U (B)	1.16	J (Z)	0.256	J-EMPC J (Z)	5.4	J-EMPC U (B)	5.11	U (B)	4.95	J-EMPC UJ (B, FD)	0.766	J (FD, Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.43	J-EMPC U (B)	5.12	U (B)	5.26	J-EMPC U (B)	5.4	J-EMPC U (B)	5.11	J-EMPC U (B)	0.389	J (FD, Z)	1.1	J (FD, Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.43	J-EMPC U (B)	5.12	U (B)	5.26	U (B)	5.4	J-EMPC U (B)	0.241	J-EMPC J (Z)	0.922	J (FD, Z)	1.87	J (FD, Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.43	U (B)	0.466	J (Z)	5.26	J-EMPC U (B)	5.4	U (B)	5.11	U (B)	0.262	J (FD, Z)	0.724	J (FD, Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.43	J-EMPC U (B)	1.25	J (Z)	0.68	J-EMPC J (Z)	5.4	J-EMPC U (B)	0.48	J (Z)	1.03	J (Z)	0.94	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.43	J-EMPC U (B)	0.547	J (Z)	5.26	J-EMPC U (B)	5.4	U (B)	5.11	J-EMPC U (B)	4.95	UJ (B, FD)	0.983	J (FD, Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.43	U (B)	12		2.26	J (Z)	5.4	U (B)	2.19	J (Z)	3.47	J (FD, Z)	1.5	J (FD, Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.43	J-EMPC U (B)	0.804	J (Z)	5.26	J-EMPC U (B)	5.4	J-EMPC U (B)	5.11	U (B)	4.95	UJ (B, FD)	0.703	J (FD, Z)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.43	J-EMPC U (B)	0.624	J (Z)	5.26	U (B)	5.4	J-EMPC U (B)	5.11	U	4.95	UJ (B, FD)	0.846	J-EMPC J (FD, Z)

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letter.

			Sample Name	SL-628-SA5A-SB-6.5-7.5		SL-631-SA5A-SB-0.0-0.5		SL-634-SA5A-SB-0.0-0.5		SL-654-SA5A-SB-0.0-0.5		SL-654-SA5A-SB-3.0-4.0		SL-954-SA5A-SB-3.0-4.0		SL-657-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		FD		N	
			Sample Date	11/12/2013		11/25/2013		11/11/2013		11/13/2013		11/13/2013		11/13/2013		11/13/2013	
			SDG	PH126		PH134		PH125		PH128		PH128		PH128		PH128	
			Start Depth	6.5		0		0		0		3		3		0	
			End Depth	7.5		0.5		0.5		0.5		4		4		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.06	U	0.234	J (Z)	0.977	J-EMPC U (B)	0.0396	J-EMPC J (Z)	0.985	U	1	U	0.0629	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.28	U (B)	1.48	J (Z)	0.291	J-EMPC J (Z)	0.569	J (Z)	0.44	J (Z)	0.417	J (Z)	0.449	J (Z)
1613B	3268-87-9	OCDD	ng/kg	3.77	J (Z)	709		118		159		76.1	J (FD)	27.7	J (FD)	24.6	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.411	J-EMPC J (Z)	57.8		10.3		13		7.49	J (FD)	2.72	J (FD, Z)	1.67	J (Z)
1613B	39001-02-0	OCDF	ng/kg	10.6	U (B)	14.8		6.17	J (Z)	6.63	J (Z)	3.27	J (FD, Z)	1.79	J (FD, Z)	0.944	J-EMPC J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.28	J-EMPC U (B)	0.853	J (Z)	4.88	U (B)	0.12	J-EMPC J (Z)	0.145	J (Z)	0.24	J-EMPC J (Z)	0.0459	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.28	J-EMPC U (B)	4.96	J-EMPC U (B)	4.88	J-EMPC U (B)	4.94	J-EMPC U (B)	4.92	J-EMPC UJ (B, FD)	5	J-EMPC UJ (B, FD)	5.13	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.06	U	0.831	J (Z)	0.977	U	0.119	J-EMPC J (Z)	0.0817	J-EMPC J (FD, Z)	1	UJ (FD)	0.0996	J-EMPC J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.28	U (B)	0.63	J (Z)	4.88	U (B)	0.264	J-EMPC J (Z)	4.92	UJ (B, FD)	0.304	J (FD, Z)	5.13	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.28	U (B)	1.64	J (Z)	4.88	J-EMPC U (B)	4.94	U (B)	4.92	J-EMPC U (B)	5	J-EMPC U (B)	5.13	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.28	U (B)	0.652	J (Z)	4.88	U (B)	0.584	J (Z)	0.52	J (Z)	0.385	J-EMPC J (Z)	5.13	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.28	U (B)	0.669	J (Z)	4.88	J-EMPC U (B)	4.94	U (B)	4.92	J-EMPC U (B)	5	U (B)	5.13	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.28	U (B)	2.03	J (Z)	0.457	J (Z)	0.739	J (Z)	0.404	J-EMPC J (Z)	0.39	J (Z)	0.318	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.28	J-EMPC U (B)	0.825	J (Z)	4.88	J-EMPC U (B)	4.94	U (B)	4.92	J-EMPC UJ (B, FD)	0.296	J (FD, Z)	5.13	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.28	U (B)	6.63		1.89	J (Z)	2.54	J (Z)	1.25	J (FD, Z)	0.705	J (FD, Z)	5.13	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.28	U (B)	0.692	J (Z)	4.88	J-EMPC U (B)	4.94	U (B)	4.92	J-EMPC U (B)	0.319	J-EMPC J (Z)	5.13	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.28	J-EMPC U (B)	4.96	U (B)	4.88	J-EMPC U (B)	4.94	J-EMPC U (B)	4.92	U (B)	5	U (B)	5.13	U (B)

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			Sample Name	SL-657-SA5A-SB-4.0-5.0		SL-657-SA5A-SB-7.0-8.0		SL-658-SA5A-SB-0.0-0.5		SL-658-SA5A-SB-4.0-5.0		SL-658-SA5A-SB-7.0-8.0		SL-667-SA5A-SB-0.0-0.5		SL-667-SA5A-SB-3.0-4.0	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	11/13/2013		11/13/2013		11/13/2013		11/13/2013		11/13/2013		11/13/2013		11/13/2013	
			SDG	PH128		PH128		PH128		PH128		PH128		PH128		PH128	
			Start Depth	4		7		0		4		7		0		3	
			End Depth	5		8		0.5		5		8		0.5		4	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0826	J (Z)	0.0638	J-EMPC J (Z)	1.01	U	0.076	J-EMPC J (Z)	0.13	J-EMPC J (Z)	0.0422	J-EMPC J (Z)	1.02	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.29	J-EMPC U (B)	5.22	U (B)	0.428	J-EMPC J (Z)	5.48	U (B)	5.41	J-EMPC U (B)	0.441	J (Z)	5.11	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	10.6	U (B)	2.37	J (Z)	1.91	J (Z)	6.64	J (Z)	10.8	U (B)	10.3	U (B)	10.2	J-EMPC U (B)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.29	J-EMPC U (B)	5.22	U (B)	5.06	J-EMPC U (B)	1.14	J (Z)	5.41	J-EMPC U (B)	5.13	J-EMPC U (B)	5.11	J-EMPC U (B)
1613B	39001-02-0	OCDF	ng/kg	10.6	U (B)	10.4	J-EMPC U (B)	10.1	J-EMPC U (B)	11	J-EMPC U (B)	10.8	U (B)	10.3	J-EMPC U (B)	10.2	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0695	J (Z)	0.0552	J-EMPC J (Z)	5.06	U	0.0447	J-EMPC J (Z)	0.0973	J (Z)	0.035	J (Z)	5.11	U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.29	J-EMPC U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	U (B)	5.41	J-EMPC U (B)	5.13	J-EMPC U (B)	5.11	U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0707	J-EMPC J (Z)	1.04	U	1.01	U	1.1	U	0.0646	J-EMPC J (Z)	0.054	J-EMPC J (Z)	1.02	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.29	J-EMPC U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	J-EMPC U (B)	5.41	J-EMPC U (B)	5.13	J-EMPC U (B)	5.11	U
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.29	U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	J-EMPC U (B)	5.41	U (B)	5.13	J-EMPC U (B)	5.11	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.29	U (B)	5.22	J-EMPC U (B)	5.06	U (B)	5.48	U (B)	5.41	U (B)	5.13	J-EMPC U (B)	5.11	U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.29	U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	U (B)	5.41	U (B)	5.13	J-EMPC U (B)	5.11	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0951	J-EMPC J (Z)	0.0899	J-EMPC J (Z)	0.15	J-EMPC J (Z)	0.0987	J-EMPC J (Z)	0.13	J (Z)	0.306	J-EMPC J (Z)	0.0347	J-EMPC J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.29	J-EMPC U (B)	5.22	J-EMPC U (B)	5.06	U (B)	5.48	J-EMPC U (B)	5.41	J-EMPC U (B)	5.13	J-EMPC U (B)	5.11	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.29	U (B)	5.22	U (B)	5.06	J-EMPC U (B)	5.48	J-EMPC U (B)	5.41	U (B)	5.13	J-EMPC U (B)	5.11	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.29	U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	U (B)	5.41	J-EMPC U (B)	5.13	U (B)	5.11	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.29	J-EMPC U (B)	5.22	J-EMPC U (B)	5.06	J-EMPC U (B)	5.48	J-EMPC U (B)	5.41	U (B)	5.13	U (B)	5.11	J-EMPC U (B)

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at the beginning of Appendix A. The letters in parenthesis can vary and there can be mor
letter.

			Sample Name	SL-670-SA5A-SB-0.0-0.5		SL-673-SA5A-SB-0.0-0.5		SL-673-SA5A-SB-4.0-5.0		SL-673-SA5A-SB-10.5-11.5		SL-676-SA5A-SB-0.0-0.5		SL-676-SA5A-SB-4.0-5.0		SL-679-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	11/13/2013		11/22/2013		11/22/2013		11/22/2013		11/22/2013		11/22/2013		12/02/2013	
			SDG	PH128		PH133		PH133		PH133		PH133		PH133		PH136	
			Start Depth	0		0		4		10.5		0		4		0	
			End Depth	0.5		0.5		5		11.5		0.5		5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.198	J-EMPC J (Z)	0.183	J-EMPC J (Z)	1.04	U	0.0709	J-EMPC J (Z)	0.181	J-EMPC J (Z)	1.08	U	0.065	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.271	J (Z)	4.24	J (Z)	1.24	J-EMPC J (Z)	0.0727	J (Z)	3.31	J (Z)	0.0841	J-EMPC J (Z)	0.856	J (Z)
1613B	3268-87-9	OCDD	ng/kg	22.7		3570		1420		10.9	U (B)	1160		11.2		338	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	2.03	J (Z)	176		65.5		5.46	U (B)	115		0.752	J (Z)	35.6	
1613B	39001-02-0	OCDF	ng/kg	10.2	U (B)	67.9		19.8		10.9	J-EMPC U (B)	61.8		10.8	J-EMPC U (B)	13.4	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.09	U	2.47	J (Z)	0.77	J (Z)	5.46	U	1.76	J (Z)	5.38	U	0.363	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.09	U (B)	1.43	J-EMPC J (Z)	0.448	J (Z)	5.46	U	1.17	J-EMPC J (Z)	5.38	J-EMPC U (B)	0.272	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02	U	0.475	J (Z)	0.192	J (Z)	0.0986	J-EMPC J (Z)	0.223	J-EMPC J (Z)	0.0593	J (Z)	0.177	J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.09	J-EMPC U (B)	1.69	J-EMPC J (Z)	0.55	J (Z)	5.46	J-EMPC U (B)	1.24	J (Z)	5.38	U (B)	0.413	J-EMPC J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.09	J-EMPC U (B)	1.5	J (Z)	0.619	J (Z)	5.46	U (B)	5.16	U (B)	5.38	J-EMPC U (B)	1.02	J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.09	U (B)	1.18	J (Z)	0.525	J-EMPC J (Z)	5.46	J-EMPC U (B)	0.428	J (Z)	5.38	J-EMPC U (B)	0.561	J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.09	J-EMPC U (B)	1.4	J (Z)	0.444	J (Z)	0.0448	J-EMPC J (Z)	0.668	J-EMPC J (Z)	0.0521	J-EMPC J (Z)	0.48	J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.138	J-EMPC J (Z)	5.25		1.8	J (Z)	5.46	U	4.56	J (Z)	5.38	J-EMPC U (B)	1.36	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.09	J-EMPC U (B)	1.61	J (Z)	0.608	J (Z)	0.0312	J (Z)	0.772	J-EMPC J (Z)	0.0661	J-EMPC J (Z)	0.689	J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.09	U (B)	34.3		10.8		5.46	J-EMPC U (B)	18.2		5.38	J-EMPC U (B)	5.14	
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.09	J-EMPC U (B)	2.18	J (Z)	0.715	J (Z)	5.46	J-EMPC U (B)	0.747	J (Z)	5.38	J-EMPC U (B)	5.12	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.09	U (B)	1.53	J (Z)	0.559	J (Z)	0.0728	J-EMPC J (Z)	0.447	J (Z)	0.0647	J-EMPC J (Z)	5.12	U (B)

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			Sample Name	SL-686-SA5A-SB-0.0-0.5		SL-986-SA5A-SB-0.0-0.5		SL-696-SA5A-SB-0.0-0.5		SL-696-SA5A-SB-4.0-5.0		SL-1008-SA5A-SB-0.0-0.5		SL-708-SA5A-SB-0.0-0.5		SL-708-SA5A-SB-4.0-5.0	
			Sample Type	N		FD		N		N		FD		N		N	
			Sample Date	11/22/2013		11/22/2013		11/18/2013		11/18/2013		11/19/2013		11/19/2013		11/19/2013	
			SDG	PH133		PH133		PH131		PH131		PH132		PH132		PH132	
			Start Depth	0		0		0		4		0		0		4	
			End Depth	0.5		0.5		0.5		5		0.5		0.5		5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0856	J-EMPC J (Z)	0.128	J-EMPC J (Z)	1	U	1.03	U	1.16	J-EMPC J (FD)	0.142	J (FD, Z)	1.05	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.364	J (Z)	0.319	J-EMPC J (Z)	0.324	J-EMPC J (Z)	5.17	J-EMPC U (B)	1.78	J (FD, Z)	0.346	J (FD, Z)	5.27	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	61.6	J (FD)	3.25	J (FD, Z)	49.8		10.3	U (B)	1140	J (FD)	34.9	J (FD, Q)	1.39	J (Z)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.89	J (FD)	0.584	J-EMPC J (FD, Z)	4.12	J (Z)	5.17	J-EMPC U (B)	80.9	J (FD)	3.31	J (FD, Q, Z)	5.27	U (B)
1613B	39001-02-0	OCDF	ng/kg	5.97	J (FD, Z)	10.3	UJ (B, FD)	2.21	J-EMPC J (Z)	10.3	J-EMPC U (B)	44.9	J (FD)	1.67	J (FD, Q, Z)	10.5	U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.116	J (FD, Z)	0.244	J-EMPC J (FD, Z)	5	U	5.17	U	0.859	J (FD, Z)	5.07	J-EMPC UJ (B, FD)	5.27	U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.08	J-EMPC UJ (B, FD)	0.385	J-EMPC J (FD, Z)	5	U	5.17	U	0.602	J-EMPC J (FD, Z)	5.07	J-EMPC UJ (B, FD)	5.27	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02	UJ (FD)	0.106	J-EMPC J (FD, Z)	1	U	1.03	U	0.462	J (FD, Z)	1.01	UJ (FD)	0.0694	J-EMPC J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.08	J-EMPC U (B)	5.15	J-EMPC U (B)	5	J-EMPC U (B)	5.17	U	2.53	J (FD, Z)	5.07	J-EMPC UJ (B, FD)	5.27	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.08	J-EMPC UJ (B, FD)	5.15	J-EMPC UJ (B, FD)	5	J-EMPC U (B)	5.17	J-EMPC U (B)	0.92	J (FD, Z)	5.07	UJ (B, FD)	5.27	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.08	UJ (B, FD)	0.486	J-EMPC J (FD, Z)	5	J-EMPC U (B)	5.17	U	1.94	J (FD, Z)	5.07	J-EMPC UJ (B, FD)	5.27	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.138	J-EMPC J (FD, Z)	0.353	J (FD, Z)	5	U	5.17	J-EMPC U (B)	1.05	J (FD, Z)	5.07	UJ (B, FD)	5.27	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.317	J-EMPC J (Z)	5.15	U (B)	0.184	J-EMPC J (Z)	0.0586	J-EMPC J (Z)	3.23	J (FD, Z)	0.28	J-EMPC J (FD, Z)	5.27	U
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.155	J-EMPC J (FD, Z)	0.368	J (FD, Z)	5	U (B)	5.17	J-EMPC U (B)	1.33	J (FD, Z)	5.07	UJ (B, FD)	5.27	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.32	J (FD, Z)	5.15	J-EMPC UJ (B, FD)	0.894	J (Z)	5.17	J-EMPC U (B)	18.6	J (FD)	0.903	J (FD, Z)	5.27	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.08	J-EMPC UJ (B, FD)	5.15	UJ (B, FD)	0.115	J-EMPC J (Z)	5.17	U	0.991	J (FD, Z)	5.07	J-EMPC UJ (B, FD)	5.27	U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.208	J (FD, Z)	0.389	J (FD, Z)	5	J-EMPC U (B)	5.17	J-EMPC U (B)	5.05	J-EMPC UJ (B, FD)	5.07	UJ (B, FD)	5.27	J-EMPC U (B)

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			Sample Name	SL-709-SA5A-SB-0.0-0.5		SL-1009-SA5A-SB-4.0-5.0		SL-709-SA5A-SB-4.0-5.0		SL-709-SA5A-SB-8.0-9.0		SL-710-SA5A-SB-0.0-0.5		SL-713-SA5A-SB-0.0-0.5		SL-713-SA5A-SB-2.5-3.5	
			Sample Type	N		FD		N		N		N		N		N	
			Sample Date	11/18/2013		11/18/2013		11/18/2013		11/18/2013		11/18/2013		11/26/2013		11/26/2013	
			SDG	PH131		PH131		PH131		PH131		PH131		PH135		PH135	
			Start Depth	0		4		4		8		0		0		2.5	
			End Depth	0.5		5		5		9		0.5		0.5		3.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.997	U	0.998	U	0.999	U	0.0756	J-EMPC J (Z)	0.0925	J-EMPC J (Z)	1.03	U	0.0776	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98	J-EMPC U (B)	4.99	U (B)	4.99	J-EMPC U (B)	5.01	J-EMPC U (B)	0.572	J (Z)	5.17	J-EMPC U (B)	5.2	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	7.61	J (Z)	95.2		82.8		13		4.27	J (Z)	8.08	J (Z)	10.4	U (B)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	4.98	J-EMPC U (B)	6.36		6.49		1.18	J (Z)	4.96	J-EMPC U (B)	0.643	J (Z)	5.2	J-EMPC U (B)
1613B	39001-02-0	OCDF	ng/kg	9.97	J-EMPC U (B)	3.32	J (Z)	4	J-EMPC J (Z)	10	U (B)	9.93	U (B)	10.3	J-EMPC U (B)	10.4	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98	U	4.99	UJ (FD)	4.99	J-EMPC UJ (B, FD)	5.01	J-EMPC U (B)	4.96	J-EMPC U (B)	5.17	J-EMPC U (B)	5.2	U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.98	U	0.133	J-EMPC J (Z)	0.0932	J-EMPC J (Z)	0.217	J (Z)	0.235	J (Z)	0.116	J-EMPC J (Z)	0.0338	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.997	U	0.998	U	0.999	U	0.0551	J-EMPC J (Z)	0.0689	J-EMPC J (Z)	1.03	U	1.04	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.98	J-EMPC U (B)	4.99	J-EMPC U (B)	4.99	J-EMPC U (B)	5.01	U (B)	4.96	J-EMPC U (B)	5.17	J-EMPC U (B)	5.2	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.98	J-EMPC U (B)	4.99	J-EMPC U (B)	4.99	J-EMPC U (B)	5.01	J-EMPC U (B)	4.96	U (B)	5.17	J-EMPC U (B)	5.2	U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	4.98	J-EMPC U (B)	4.99	J-EMPC U (B)	4.99	J-EMPC U (B)	5.01	J-EMPC U (B)	4.96	J-EMPC U (B)	0.0721	J-EMPC J (Z)	0.054	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.98	U	4.99	J-EMPC UJ (B, FD)	0.177	J-EMPC J (FD, Z)	0.22	J (Z)	0.143	J (Z)	5.17	U (B)	5.2	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0747	J-EMPC J (Z)	0.266	J-EMPC J (Z)	0.391	J (Z)	0.191	J (Z)	0.301	J-EMPC J (Z)	5.17	U (B)	5.2	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.98	U	4.99	J-EMPC U (B)	4.99	U (B)	0.188	J-EMPC J (Z)	4.96	U (B)	5.17	J-EMPC U (B)	5.2	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.98	J-EMPC U (B)	1.39	J (Z)	1.7	J (Z)	5.01	U (B)	4.96	J-EMPC U (B)	5.17	U (B)	5.2	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.98	U	0.0855	J-EMPC J (Z)	0.111	J (Z)	0.171	J (Z)	0.119	J-EMPC J (Z)	5.17	U (B)	5.2	U
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	4.98	J-EMPC U (B)	4.99	U	4.99	U	5.01	U (B)	0.416	J-EMPC J (Z)	5.17	U (B)	5.2	J-EMPC U (B)

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			Sample Name	SL-1015-SA5A-SB-0.0-0.5		SL-715-SA5A-SB-0.0-0.5		SL-715-SA5A-SB-6.0-7.0		SL-719-SA5A-SB-0.0-0.5		SL-720-SA5A-SB-0.0-0.5		SL-722-SA5A-SB-0.0-0.5		SL-724-SA5A-SB-0.0-0.5	
			Sample Type	FD		N		N		N		N		N		N	
			Sample Date	11/25/2013		11/25/2013		11/25/2013		11/26/2013		11/26/2013		11/18/2013		11/26/2013	
			SDG	PH134		PH134		PH134		PH135		PH135		PH131		PH135	
			Start Depth	0		0		6		0		0		0		0	
			End Depth	0.5		0.5		7		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.262	J (Z)	0.301	J (Z)	0.296	J (Z)	1.02	U	1.01	U	0.999	U	1	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	4.12	J (Z)	3.15	J (Z)	2.83	J (Z)	5.08	J-EMPC U (B)	5.03	U (B)	0.665	J (Z)	5.02	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	29900	J (FD, *#)	10200	J (FD, *#)	5390	J (*#)	89.2		1.86	J (Z)	2.76	J (Z)	1.25	J-EMPC J (Z)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	547	J (FD)	273	J (FD, Q)	231		8.2		5.03	U (B)	5	U (B)	5.02	J-EMPC U (B)
1613B	39001-02-0	OCDF	ng/kg	245	J (FD)	91.9	J (FD)	88.7		6.8	J (Z)	10.1	U (B)	9.99	J-EMPC U (B)	10	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.75	J (Z)	1.46	J (Z)	1.49	J (Z)	5.08	J-EMPC U (B)	5.03	J-EMPC U (B)	5	J-EMPC U (B)	5.02	J-EMPC U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	1.02	J (Z)	0.914	J (Z)	0.95	J (Z)	0.0589	J-EMPC J (Z)	5.03	U	0.109	J-EMPC J (Z)	0.0729	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.231	J (Z)	0.314	J (Z)	0.417	J (Z)	1.02	U	1.01	U	0.0667	J-EMPC J (Z)	1	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	13.1	J (FD)	4.62	J (FD, Z)	2.95	J (Z)	5.08	U (B)	5.03	J-EMPC U (B)	5	J-EMPC U (B)	5.02	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.11	J-EMPC U (B)	5.07	U (B)	5.11	U (B)	5.08	J-EMPC U (B)	5.03	J-EMPC U (B)	5	U (B)	5.02	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.11	U (B)	5.07	U (B)	5.11	U (B)	0.0634	J (Z)	5.03	U	5	J-EMPC U (B)	0.0697	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	2.82	J (FD, Z)	1.42	J (FD, Z)	1.2	J (Z)	5.08	J-EMPC U (B)	5.03	U (B)	5	J-EMPC U (B)	5.02	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	17	J (FD)	8.18	J (FD)	6.95		0.301	J (Z)	5.03	U	0.428	J-EMPC J (Z)	5.02	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4	J (FD, Z)	1.98	J (FD, Z)	1.6	J (Z)	5.08	U (B)	5.03	U (B)	5	J-EMPC U (B)	5.02	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	99.9	J (FD)	35.5	J (FD)	28.6		1.91	J (Z)	5.03	J-EMPC U (B)	5	J-EMPC U (B)	5.02	U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	2.88	J (FD, Z)	1.55	J (FD, Z)	1.39	J (Z)	5.08	U (B)	5.03	U	0.0594	J-EMPC J (Z)	5.02	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.951	J (Z)	0.585	J-EMPC J (Z)	0.562	J (Z)	5.08	U	5.03	J-EMPC U (B)	5	J-EMPC U (B)	5.02	J-EMPC U (B)

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letter.

			Sample Name	SL-732-SA5A-SB-0.0-0.5		SL-735-SA5A-SB-0.0-0.5		SL-735-SA5A-SB-2.5-3.5		SL-736-SA5A-SB-0.0-0.5		SL-736-SA5A-SB-3.0-4.0		SL-738-SA5A-SB-0.0-0.5		SL-738-SA5A-SB-3.0-4.0	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	11/19/2013		11/18/2013		11/18/2013		11/18/2013		11/18/2013		11/26/2013		11/26/2013	
			SDG	PH132		PH131		PH131		PH131		PH131		PH135		PH135	
			Start Depth	0		0		2.5		0		3		0		3	
			End Depth	0.5		0.5		3.5		0.5		4		0.5		4	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.01	U	0.983	U	1.04	U	1.05	U	0.0791	J-EMPC J (Z)	1.06	U	1.07	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.07	J-EMPC U (B)	4.92	U (B)	5.22	U (B)	5.24	J-EMPC U (B)	5.39	J-EMPC U (B)	5.29	U	5.37	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	10.1	J-EMPC U (B)	33.9		10.4	U (B)	73.9		10.8	J-EMPC U (B)	10.6	U (B)	10.7	J-EMPC U (B)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.07	J-EMPC U (B)	2.8	J (Z)	5.22	J-EMPC U (B)	2.94	J (Z)	5.39	J-EMPC U (B)	5.29	J-EMPC U (B)	5.37	U (B)
1613B	39001-02-0	OCDF	ng/kg	10.1	U (B)	1.34	J (Z)	10.4	U (B)	10.5	J-EMPC U (B)	10.8	J-EMPC U (B)	10.6	J-EMPC U (B)	10.7	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.07	J-EMPC U (B)	4.92	J-EMPC U (B)	5.22	U (B)	5.24	J-EMPC U (B)	5.39	U	5.29	U	5.37	U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.07	J-EMPC U (B)	0.134	J (Z)	5.22	U	5.24	U	0.0749	J-EMPC J (Z)	5.29	U	5.37	U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0467	J-EMPC J (Z)	0.0488	J-EMPC J (Z)	1.04	U	0.0558	J-EMPC J (Z)	1.08	U	1.06	U	1.07	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.07	J-EMPC U (B)	4.92	J-EMPC U (B)	5.22	J-EMPC U (B)	5.24	J-EMPC U (B)	5.39	J-EMPC U (B)	5.29	J-EMPC U (B)	5.37	U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.07	J-EMPC U (B)	4.92	U (B)	5.22	J-EMPC U (B)	5.24	U (B)	5.39	J-EMPC U (B)	5.29	J-EMPC U (B)	5.37	U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.07	J-EMPC U (B)	4.92	J-EMPC U (B)	5.22	J-EMPC U (B)	5.24	U (B)	5.39	J-EMPC U (B)	5.29	U	0.0326	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.07	J-EMPC U (B)	4.92	J-EMPC U (B)	5.22	J-EMPC U (B)	5.24	J-EMPC U (B)	5.39	J-EMPC U (B)	5.29	U	5.37	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.07	J-EMPC U (B)	0.183	J-EMPC J (Z)	0.165	J-EMPC J (Z)	0.202	J (Z)	0.0699	J-EMPC J (Z)	5.29	J-EMPC U (B)	5.37	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.07	J-EMPC U (B)	4.92	J-EMPC U (B)	5.22	J-EMPC U (B)	5.24	U	5.39	U (B)	5.29	U	5.37	U
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.07	U (B)	0.585	J (Z)	5.22	J-EMPC U (B)	5.24	U (B)	5.39	J-EMPC U (B)	5.29	J-EMPC U (B)	5.37	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.07	U (B)	0.0959	J (Z)	0.0325	J (Z)	0.0982	J-EMPC J (Z)	0.0463	J-EMPC J (Z)	5.29	J-EMPC U (B)	5.37	U
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.07	U (B)	4.92	J-EMPC U (B)	5.22	U (B)	5.24	J-EMPC U (B)	5.39	J-EMPC U (B)	5.29	U (B)	5.37	J-EMPC U (B)

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			Sample Name	SL-767-SA5A-SB-0.0-0.5		SL-767-SA5A-SB-2.5-3.5		SL-772-SA5A-SB-0.0-0.5		SL-773-SA5A-SB-0.0-0.5		SL-1174-SA5A-SB-0.0-0.5		SL-774-SA5A-SB-0.0-0.5		SL-775-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		FD		N		N	
			Sample Date	11/26/2013		11/26/2013		06/04/2013		06/10/2013		06/10/2013		06/10/2013		06/13/2013	
			SDG	PH135		PH135		PH047		PH052		PH052		PH052		PH056	
			Start Depth	0		2.5		0		0		0		0		0	
			End Depth	0.5		3.5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.111	J-EMPC J (Z)	0.992	U	1.08	J-EMPC U (B)	1.01	J-EMPC U (B)	1.03	J-EMPC UJ (B, FD)	1.02	UJ (FD)	0.0543	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.245	J-EMPC J (Z)	0.266	J-EMPC J (Z)	0.305	J (Z)	1.85	J (Z)	5.15	J-EMPC UJ (B, FD)	0.548	J (FD, Z)	1.13	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	138		49.8		2.41	J (Z)	651		7.33	J (FD, Z)	64.9	J (FD, Q)	399	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	4.68	J (Z)	3.05	J (Z)	0.35	J-EMPC J (Z)	63.7		0.69	J (FD, Z)	5.55	J (FD)	25.3	
1613B	39001-02-0	OCDF	ng/kg	1.39	J (Z)	1.12	J (Z)	10.8	J-EMPC U (B)	19.2		10.3	UJ (B, FD)	2.08	J (FD, Z)	9.56	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.98	J-EMPC U (B)	4.96	J-EMPC U (B)	0.114	J-EMPC J (Z)	0.897	J (Z)	5.15	J-EMPC UJ (B, FD)	5.09	J-EMPC UJ (B, FD)	0.404	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.0955	J-EMPC J (Z)	0.262	J-EMPC J (Z)	5.41	J-EMPC U (B)	5.03	U (B)	5.15	J-EMPC U (B)	5.09	J-EMPC U (B)	0.261	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0553	J-EMPC J (Z)	0.089	J-EMPC J (Z)	0.0152	J-EMPC J (Z)	0.208	J (Z)	1.03	J-EMPC U (B)	1.02	J-EMPC U (B)	0.0637	J-EMPC J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.98	J-EMPC U (B)	4.96	U (B)	5.41	U (B)	0.66	J (Z)	5.15	J-EMPC UJ (B, FD)	5.09	J-EMPC UJ (B, FD)	0.248	J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.98	J-EMPC U (B)	4.96	J-EMPC U (B)	5.41	U (B)	5.03	U (B)	5.15	J-EMPC U (B)	5.09	J-EMPC U (B)	5.04	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.196	J (Z)	0.275	J (Z)	5.41	U (B)	5.03	U (B)	5.15	J-EMPC U (B)	5.09	U (B)	5.04	U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.98	J-EMPC U (B)	4.96	U (B)	0.126	J-EMPC J (Z)	5.03	U (B)	5.15	J-EMPC U (B)	5.09	J-EMPC U (B)	0.147	J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.238	J-EMPC J (Z)	0.232	J-EMPC J (Z)	0.17	J (Z)	2.37	J (Z)	5.15	UJ (B, FD)	0.453	J (FD, Z)	1.03	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.98	J-EMPC U (B)	4.96	J-EMPC U (B)	0.147	J (Z)	5.03	U (B)	5.15	U (B)	5.09	J-EMPC U (B)	0.172	J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.448	J (Z)	0.526	J (Z)	5.41	J-EMPC U (B)	8.12		5.15	UJ (B, FD)	0.762	J (FD, Z)	2.97	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.98	J-EMPC U (B)	4.96	J-EMPC U (B)	5.41	U (B)	5.03	U (B)	5.15	U (B)	5.09	J-EMPC U (B)	5.04	U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	4.98	U (B)	4.96	J-EMPC U (B)	5.41	U (B)	5.03	U	5.15	J-EMPC U (B)	5.09	U (B)	5.04	U (B)

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			Sample Name	SL-776-SA5A-SB-0.0-0.5		SL-1176-SA5A-SB-6.0-7.0		SL-776-SA5A-SB-6.0-7.0		SL-777-SA5A-SB-0.0-0.5		SL-779-SA5A-SB-0.0-0.5		SL-780-SA5A-SB-0.0-0.5		SL-1180-SA5A-SB-3.0-4.0	
			Sample Type	N		FD		N		N		N		N		FD	
			Sample Date	06/10/2013		06/10/2013		06/10/2013		06/10/2013		06/10/2013		06/17/2013		06/17/2013	
			SDG	PH052		PH052		PH052		PH053		PH053		PH058		PH058	
			Start Depth	0		6		6		0		0		0		3	
			End Depth	0.5		7		7		0.5		0.5		0.5		4	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.994	J-EMPC U (B)	1.07	U	1.07	U	0.0432	J-EMPC J (Z)	0.0246	J (Z)	1.02	U (B)	1.04	U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.12	J (Z)	5.35	J-EMPC U (B)	5.34	J-EMPC U (B)	0.8	J (Z)	0.56	J (Z)	3.31	J (Z)	5.19	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	107		10.7	U (B)	10.7	U (B)	172		134		1520		10.4	UJ (B, FD)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	9.3		5.35	U (B)	5.34	U (B)	10.7		7.43		72.9		5.19	U (B)
1613B	39001-02-0	OCDF	ng/kg	3.16	J (Z)	10.7	U (B)	10.7	U (B)	2.49	J (Z)	2.05	J (Z)	13.7		10.4	UJ (B, FD)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.97	U (B)	0.0598	J (FD, Z)	5.34	UJ (FD)	0.166	J-EMPC J (Z)	0.14	J-EMPC J (Z)	1.16	J (Z)	0.0407	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.97	U (B)	5.35	J-EMPC U (B)	5.34	J-EMPC U (B)	5.09	J-EMPC U (B)	4.91	U (B)	0.855	J (Z)	5.19	UJ (B, FD)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.994	U (B)	0.0313	J-EMPC J (FD, Z)	1.07	UJ (FD)	0.101	J (Z)	0.0369	J-EMPC J (Z)	0.28	J (Z)	0.0192	J-EMPC J (FD, Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.97	J-EMPC U (B)	5.35	J-EMPC UJ (B, FD)	5.34	UJ (B, FD)	5.09	U (B)	4.91	U (B)	5.11	U (B)	5.19	U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.97	U (B)	5.35	UJ (B, FD)	5.34	UJ (FD)	5.09	U (B)	4.91	U (B)	0.609	J (Z)	5.19	J-EMPC UJ (B, FD)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	4.97	U (B)	5.35	J-EMPC UJ (B, FD)	5.34	J-EMPC UJ (B, FD)	5.09	U (B)	4.91	U (B)	0.667	J (Z)	5.19	J-EMPC UJ (B, FD)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.97	U (B)	5.35	J-EMPC U (B)	5.34	J-EMPC U (B)	0.142	J (Z)	4.91	U (B)	0.338	J (Z)	5.19	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.847	J (Z)	5.35	J-EMPC U (B)	5.34	J-EMPC U (B)	0.639	J (Z)	0.369	J (Z)	3.12	J (Z)	5.19	UJ (B, FD)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	4.97	J-EMPC U (B)	5.35	J-EMPC U (B)	5.34	J-EMPC U (B)	5.09	U (B)	4.91	U (B)	0.378	J (Z)	5.19	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.44	J (Z)	5.35	J-EMPC U (B)	5.34	U (B)	1.03	J (Z)	0.74	J (Z)	4.69	J (Z)	5.19	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.97	U (B)	5.35	U (B)	5.34	J-EMPC U (B)	5.09	U (B)	4.91	J-EMPC U (B)	0.443	J (Z)	5.19	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	4.97	U (B)	5.35	U (B)	5.34	J-EMPC U (B)	0.366	J (Z)	0.227	J-EMPC J (Z)	0.546	J (Z)	5.19	J-EMPC U (B)

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letter.

				Sample Name	SL-780-SA5A-SB-3.0-4.0		SL-781-SA5A-SB-0.0-0.5		SL-781-SA5A-SB-2.0-3.0		SL-782-SA5A-SB-0.0-0.5		SL-782-SA5A-SB-4.5-5.5		SL-1183-SA5A-SB-0.0-0.5		SL-783-SA5A-SB-0.0-0.5	
				Sample Type	N		N		N		N		N		FD		N	
				Sample Date	06/17/2013		06/12/2013		06/12/2013		06/12/2013		06/12/2013		06/11/2013		06/11/2013	
				SDG	PH058		PH055		PH055		PH055		PH055		PH054		PH054	
				Start Depth	3		0		2		0		4.5		0		0	
				End Depth	4		0.5		3		0.5		5.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit															
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.04	U (B)		1.04	J-EMPC U (B)	1	J-EMPC U (B)	1.02	U	1.05	U	1.03	J-EMPC UJ (B, FD)	1.02	UJ (FD)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.19	J-EMPC U (B)		5.2	J-EMPC U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	1.74	J (FD, Z)
1613B	3268-87-9	OCDD	ng/kg	10.4	UJ (B, FD)		94.2		10	U (B)	10.6		54.8		58.8	J (FD)	1170	J (FD)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.19	U (B)		3.55	J (Z)	5	J-EMPC U (B)	0.888	J-EMPC J (Z)	3.34	J (Z)	5.97	J (FD)	50.4	J (FD)
1613B	39001-02-0	OCDF	ng/kg	10.4	J-EMPC UJ (B, FD)		10.4	U (B)	10	U (B)	10.2	U (B)	10.5	J-EMPC U (B)	1.14	J (FD, Z)	12.4	J (FD)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0482	J-EMPC J (Z)		5.2	J-EMPC U (B)	5	U	5.08	J-EMPC U (B)	5.27	U (B)	5.17	J-EMPC UJ (B, FD)	0.711	J (FD, Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.19	J-EMPC UJ (B, FD)		5.2	J-EMPC U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	5.08	UJ (B, FD)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.04	UJ (FD)		1.04	J-EMPC U (B)	1	U	1.02	U	1.05	J-EMPC U (B)	1.03	J-EMPC UJ (B, FD)	1.02	J-EMPC UJ (B, FD)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.19	U (B)		5.2	J-EMPC U (B)	5	U (B)	5.08	U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	5.08	UJ (B, FD)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.19	J-EMPC UJ (B, FD)		5.2	J-EMPC U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC U (B)	5.08	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.19	J-EMPC UJ (B, FD)		5.2	U (B)	5	U (B)	5.08	J-EMPC U (B)	5.27	U (B)	5.17	J-EMPC UJ (B, FD)	5.08	J-EMPC UJ (B, FD)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.19	J-EMPC U (B)		5.2	U (B)	5	J-EMPC U (B)	5.08	U	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	5.08	J-EMPC UJ (B, FD)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.19	J-EMPC UJ (B, FD)		5.2	U (B)	5	U (B)	5.08	U (B)	5.27	J-EMPC U (B)	0.373	J (FD, Z)	1.8	J (FD, Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.19	U (B)		5.2	U (B)	5	J-EMPC U (B)	5.08	U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	5.08	UJ (B, FD)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.19	J-EMPC U (B)		5.2	J-EMPC U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	U (B)	0.578	J (FD, Z)	3.98	J (FD, Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.19	J-EMPC U (B)		5.2	J-EMPC U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	J-EMPC U (B)	5.17	J-EMPC UJ (B, FD)	5.08	UJ (B, FD)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.19	J-EMPC U (B)		5.2	U (B)	5	J-EMPC U (B)	5.08	J-EMPC U (B)	5.27	J-EMPC U (B)	5.17	U (B)	5.08	U (B)

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			Sample Name	SL-784-SA5A-SB-0.0-0.5		SL-784-SA5A-SB-2.5-3.5		SL-785-SA5A-SB-0.0-0.5		SL-786-SA5A-SB-0.0-0.5		SL-787-SA5A-SB-0.0-0.5		SL-788-SA5A-SB-0.0-0.5		SL-789-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/12/2013		06/12/2013		06/11/2013		06/11/2013		06/11/2013		06/11/2013		06/11/2013	
			SDG	PH055		PH055		PH054		PH054		PH054		PH054		PH054	
			Start Depth	0		2.5		0		0		0		0		0	
			End Depth	0.5		3.5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.03	U	1.03	U	0.992	J-EMPC U (B)	1.02	U (B)	0.226	J (Z)	1	U (B)	1.01	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.13	J-EMPC U (B)	5.15	U (B)	2.02	J (Z)	2.22	J (Z)	9.97		1.59	J (Z)	1.28	J (Z)
1613B	3268-87-9	OCDD	ng/kg	95.3		66.9		1860		1140		9790	J (*#)	1010		721	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	4.89	J (Z)	4.43	J (Z)	65.6		52.9		356		44.4		33.4	
1613B	39001-02-0	OCDF	ng/kg	1.41	J (Z)	1.46	J (Z)	11.9		11.1		68.9		8.47	J (Z)	10.7	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.13	J-EMPC U (B)	5.15	J-EMPC U (B)	0.71	J-EMPC J (Z)	0.884	J (Z)	4.03	J (Z)	0.611	J (Z)	0.556	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.13	J-EMPC U (B)	5.15	U (B)	4.96	U (B)	5.09	U (B)	2.66	J (Z)	5	U (B)	5.04	U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.03	J-EMPC U (B)	1.03	U	0.992	J-EMPC U (B)	0.193	J (Z)	1.02	U (B)	0.185	J (Z)	1.01	U (B)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.13	U (B)	5.15	J-EMPC U (B)	4.96	J-EMPC U (B)	5.09	U (B)	0.919	J (Z)	5	J-EMPC U (B)	5.04	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.13	J-EMPC U (B)	5.15	U (B)	4.96	J-EMPC U (B)	5.09	U (B)	5.08	U (B)	5	J-EMPC U (B)	5.04	U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.13	U (B)	5.15	J-EMPC U (B)	4.96	J-EMPC U (B)	0.698	J (Z)	0.574	J (Z)	5	U (B)	5.04	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.13	J-EMPC U (B)	5.15	U (B)	4.96	U (B)	5.09	J-EMPC U (B)	0.569	J-EMPC J (Z)	5	U (B)	5.04	U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.13	J-EMPC U (B)	5.15	U (B)	2.17	J (Z)	2.18	J (Z)	12.5		1.82	J (Z)	1.22	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.13	J-EMPC U (B)	5.15	J-EMPC U (B)	4.96	U (B)	5.09	U (B)	0.891	J (Z)	5	U (B)	5.04	U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	0.543	J-EMPC J (Z)	5.15	U (B)	3.68	J (Z)	3.69	J (Z)	20.3		2.87	J (Z)	3.18	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.13	U (B)	5.15	U	4.96	J-EMPC U (B)	0.461	J (Z)	1.42	J (Z)	5	U (B)	5.04	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.13	U (B)	5.15	J-EMPC U (B)	4.96	J-EMPC U (B)	5.09	J-EMPC U (B)	5.08	J-EMPC U (B)	5	U (B)	5.04	U (B)

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			Sample Name	SL-789-SA5A-SB-5.0-6.0		SL-790-SA5A-SB-0.0-0.5		SL-791-SA5A-SB-0.0-0.5		SL-792-SA5A-SB-0.0-0.5		SL-793-SA5A-SB-0.0-0.5		SL-795-SA5A-SB-0.0-0.5		SL-811-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/11/2013		06/13/2013		06/13/2013		06/13/2013		06/13/2013		06/13/2013		06/05/2013	
			SDG	PH054		PH056		PH056		PH056		PH056		PH056		PH047	
			Start Depth	5		0		0		0		0		0		0	
			End Depth	6		0.5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.02	J-EMPC U (B)	0.0317	J-EMPC J (Z)	0.0445	J-EMPC J (Z)	1.01	U	0.19	J-EMPC J (Z)	1.14		1	U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.1	U (B)	1.1	J (Z)	1.56	J (Z)	5.05	J-EMPC U (B)	4.78	J (Z)	39		2.28	J (Z)
1613B	3268-87-9	OCDD	ng/kg	39.7		854		892		33.2		2940		22100		1160	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	1.9	J (Z)	35.8		40.1		2.22	J (Z)	167		955		60.9	
1613B	39001-02-0	OCDF	ng/kg	10.2	U (B)	15.1		12.7		1.66	J (Z)	89.9		173		36.4	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.1	U (B)	0.447	J (Z)	0.584	J (Z)	5.05	J-EMPC U (B)	2.12	J (Z)	16.3		0.848	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.1	J-EMPC U (B)	0.295	J (Z)	0.374	J-EMPC J (Z)	5.05	J-EMPC U (B)	1.29	J (Z)	9.96		0.509	J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.02	U	0.196	J-EMPC J (Z)	0.146	J (Z)	1.01	U	0.225	J (Z)	0.227	J-EMPC J (Z)	0.0955	J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.1	J-EMPC U (B)	0.325	J (Z)	0.269	J (Z)	5.05	J-EMPC U (B)	1.3	J (Z)	2.07	J (Z)	0.884	J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.1	J-EMPC U (B)	0.181	J (Z)	0.25	J-EMPC J (Z)	5.05	J-EMPC U (B)	0.461	J-EMPC J (Z)	0.618	J (Z)	0.219	J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.1	U (B)	5.04	U (B)	4.92	U (B)	5.05	U (B)	0.468	J-EMPC J (Z)	0.607	J (Z)	5.02	U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.1	J-EMPC U (B)	0.213	J (Z)	0.186	J (Z)	5.05	J-EMPC U (B)	0.503	J (Z)	0.968	J (Z)	0.446	J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.1	J-EMPC U (B)	1.27	J (Z)	1.74	J (Z)	0.161	J (Z)	5.78		34.4		2.1	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.1	U (B)	0.258	J (Z)	0.214	J (Z)	5.05	J-EMPC U (B)	0.686	J (Z)	1.48	J (Z)	0.512	J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.1	U (B)	4.49	J (Z)	3.79	J (Z)	0.426	J-EMPC J (Z)	17		46.3		10.8	
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.1	J-EMPC U (B)	0.248	J (Z)	0.275	J (Z)	5.05	U (B)	0.721	J (Z)	2.91	J (Z)	0.357	J (Z)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.1	U (B)	5.04	J-EMPC U (B)	4.92	U (B)	5.05	J-EMPC U (B)	0.422	J (Z)	5.09	U	0.371	J (Z)

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			Sample Name	SL-811-SA5A-SB-5.5-6.5		SL-813-SA5A-SB-0.0-0.5		SL-814-SA5A-SB-0.0-0.5		SL-814-SA5A-SB-4.0-5.0		SL-815-SA5A-SB-0.0-0.5		SL-819-SA5A-SB-0.0-0.5		SL-819-SA5A-SB-6.5-7.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/05/2013		06/05/2013		06/05/2013		06/05/2013		05/31/2013		05/30/2013		05/30/2013	
			SDG	PH047		PH047		PH047		PH047		PH044		PH043		PH043	
			Start Depth	5.5		0		0		4		0		0		6.5	
			End Depth	6.5		0.5		0.5		5		0.5		0.5		7.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.04	U	0.99	U (B)	0.978	J-EMPC U (B)	1.02	J-EMPC U (B)	0.0862	J (Z)	1.02	U	0.0435	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.236	J-EMPC J (Z)	1.45	J (Z)	1.34	J (Z)	5.12	J-EMPC U (B)	0.577	J (Z)	0.308	J (Z)	0.0711	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	7.2	J (Z)	676		762		10.2	U (B)	207		33.8		1.6	J (Z)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.703	J (Z)	35.4		50.6		5.12	J-EMPC U (B)	14.3		1.9	J (Z)	5.46	U (B)
1613B	39001-02-0	OCDF	ng/kg	0.635	J (Z)	11.6		49.3		10.2	U (B)	11.6		0.852	J (Z)	10.9	U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.151	J-EMPC J (Z)	0.575	J (Z)	0.627	J (Z)	5.12	J-EMPC U (B)	0.253	J (Z)	0.0654	J-EMPC J (Z)	0.0351	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.18	U (B)	0.362	J (Z)	0.277	J (Z)	5.12	J-EMPC U (B)	5.06	J-EMPC U (B)	0.135	J (Z)	0.135	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0212	J (Z)	0.257	J (Z)	0.15	J (Z)	0.031	J-EMPC J (Z)	0.0861	J-EMPC J (Z)	1.02	U	0.05	J-EMPC J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.18	U (B)	0.303	J-EMPC J (Z)	0.987	J (Z)	5.12	J-EMPC U (B)	0.315	J-EMPC J (Z)	0.0563	J-EMPC J (Z)	0.0565	J-EMPC J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.119	J (Z)	0.37	J (Z)	0.215	J (Z)	5.12	U (B)	0.363	J (Z)	0.0924	J-EMPC J (Z)	0.146	J-EMPC J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.18	J-EMPC U (B)	0.514	J (Z)	4.89	U (B)	5.12	U (B)	5.06	U (B)	0.13	J-EMPC J (Z)	0.173	J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.146	J (Z)	0.255	J (Z)	0.513	J (Z)	5.12	J-EMPC U (B)	0.195	J (Z)	0.102	J (Z)	5.46	U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.164	J (Z)	1.56	J (Z)	1.74	J (Z)	5.12	U (B)	0.633	J-EMPC J (Z)	0.273	J (Z)	0.0908	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.165	J (Z)	0.301	J (Z)	0.57	J (Z)	5.12	J-EMPC U (B)	0.204	J-EMPC J (Z)	5.11	J-EMPC U (B)	5.46	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.18	U (B)	3.95	J (Z)	12.5		5.12	U (B)	2.51	J (Z)	0.273	J (Z)	5.46	J-EMPC U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.18	U (B)	0.242	J-EMPC J (Z)	0.429	J (Z)	5.12	J-EMPC U (B)	5.06	U (B)	5.11	J-EMPC U (B)	5.46	U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.18	U (B)	0.303	J (Z)	0.346	J (Z)	5.12	U (B)	0.481	J (Z)	0.303	J (Z)	5.46	U (B)

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at the beginning of Appendix A. The letters in parenthesis can vary and there can be mor
letter.

			Sample Name	SL-822-SA5A-SB-0.0-0.5		SL-823-SA5A-SB-0.0-0.5		SL-824-SA5A-SB-0.0-0.5		SL-825-SA5A-SB-0.0-0.5		SL-826-SA5A-SB-0.0-0.5		SL-826-SA5A-SB-4.0-5.0		SL-826-SA5A-SB-9.0-10.0	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/17/2013		06/17/2013		06/17/2013		06/17/2013		06/12/2013		06/12/2013		06/12/2013	
			SDG	PH058		PH058		PH058		PH058		PH055		PH055		PH055	
			Start Depth	0		0		0		0		0		4		9	
			End Depth	0.5		0.5		0.5		0.5		0.5		5		10	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1	J-EMPC U (B)	1.02	J-EMPC U (B)	1	U (B)	0.999	J-EMPC U (B)	0.99	U	1.04	J-EMPC U (B)	1.06	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.76	J (Z)	1.58	J (Z)	1.04	J (Z)	1.03	J (Z)	1.12	J (Z)	5.22	J-EMPC U (B)	5.3	U (B)
1613B	3268-87-9	OCDD	ng/kg	855		463		423		475		527		10.4	U (B)	121	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	38.1		24.3		21.6		22.4		21.9		5.22	J-EMPC U (B)	6.71	
1613B	39001-02-0	OCDF	ng/kg	13.7		4.55	J (Z)	8.46	J (Z)	6.44	J (Z)	6.51	J (Z)	10.4	J-EMPC U (B)	2.43	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.62	J-EMPC J (Z)	0.489	J-EMPC J (Z)	0.362	J-EMPC J (Z)	0.356	J (Z)	4.95	J-EMPC U (B)	5.22	J-EMPC U (B)	5.3	U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.472	J (Z)	0.325	J (Z)	0.403	J (Z)	0.309	J-EMPC J (Z)	4.95	J-EMPC U (B)	5.22	U (B)	5.3	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.129	J-EMPC J (Z)	0.447	J-EMPC J (Z)	0.179	J (Z)	0.999	U	0.99	J-EMPC U (B)	1.04	J-EMPC U (B)	1.06	U (B)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.02	J-EMPC U (B)	5.1	U (B)	5	U (B)	5	U (B)	4.95	J-EMPC U (B)	5.22	U (B)	5.3	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.02	U (B)	0.285	J (Z)	0.266	J (Z)	0.254	J-EMPC J (Z)	4.95	J-EMPC U (B)	5.22	J-EMPC U (B)	5.3	U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.02	U (B)	5.1	U (B)	5	U (B)	5	U (B)	4.95	U (B)	5.22	J-EMPC U (B)	5.3	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.202	J (Z)	0.172	J (Z)	0.222	J (Z)	0.144	J (Z)	4.95	J-EMPC U (B)	5.22	J-EMPC U (B)	5.3	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.56	J (Z)	1.2	J (Z)	0.988	J (Z)	0.962	J (Z)	1.02	J (Z)	5.22	J-EMPC U (B)	0.374	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.193	J (Z)	0.186	J (Z)	0.223	J (Z)	0.191	J (Z)	4.95	U (B)	5.22	J-EMPC U (B)	5.3	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	3.66	J (Z)	1.69	J (Z)	2.73	J (Z)	2.15	J (Z)	2.15	J (Z)	5.22	J-EMPC U (B)	0.76	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.233	J (Z)	0.189	J-EMPC J (Z)	0.256	J (Z)	0.218	J (Z)	4.95	J-EMPC U (B)	5.22	J-EMPC U (B)	5.3	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.428	J (Z)	0.501	J (Z)	0.308	J (Z)	0.462	J (Z)	4.95	J-EMPC U (B)	5.22	J-EMPC U (B)	5.3	J-EMPC U (B)

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			Sample Name	SL-826-SA5A-SB-14.0-15.0		SL-827-SA5A-SB-0.0-0.5		SL-828-SA5A-SB-0.0-0.5		SL-829-SA5A-SB-0.0-0.5		SL-830-SA5A-SB-2.75-3.75		SL-831-SA5A-SB-0.0-0.5		SL-831-SA5A-SB-4.5-5.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/12/2013		06/07/2013		05/28/2013		05/28/2013		05/28/2013		05/29/2013		05/29/2013	
			SDG	PH055		PH051		PH041		PH041		PH041		PH042		PH042	
			Start Depth	14		0		0		0		2.75		0		4.5	
			End Depth	15		0.5		0.5		0.5		3.75		0.5		5.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.07	J-EMPC U (B)	0.975	U	0.0599	J (Z)	0.0373	J (Z)	0.0831	J-EMPC J (Z)	0.124	J-EMPC J (Z)	1	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.34	U	0.535	J (Z)	1.75	J (Z)	2.23	J (Z)	1.99	J (Z)	10		0.205	J (Z)
1613B	3268-87-9	OCDD	ng/kg	10.7	J-EMPC U (B)	195		533		758		828		5720	J (*#)	49.5	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.34	U (B)	11.3		46		71.4		100		670		4.63	J (Z)
1613B	39001-02-0	OCDF	ng/kg	10.7	J-EMPC U (B)	6.08	J (Z)	41.3		72.4		36.1		393		3.91	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.34	U (B)	4.88	U (B)	0.665	J-EMPC J (Z)	1	J (Z)	1.09	J (Z)	3.96	J (Z)	0.0738	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.34	J-EMPC U (B)	4.88	J-EMPC U (B)	0.498	J (Z)	0.383	J-EMPC J (Z)	0.642	J (Z)	1.59	J-EMPC J (Z)	0.0744	J-EMPC J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.07	U	0.181	J-EMPC J (Z)	0.211	J-EMPC J (Z)	0.992	J-EMPC U (B)	0.259	J-EMPC J (Z)	1	U	1	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.34	J-EMPC U (B)	4.88	U (B)	1.19	J (Z)	2.04	J (Z)	1.13	J (Z)	10.4		0.0795	J-EMPC J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.34	J-EMPC U (B)	4.88	U (B)	0.493	J (Z)	0.2	J (Z)	0.815	J (Z)	1.25	J (Z)	0.0654	J-EMPC J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.34	U (B)	4.88	U (B)	0.568	J (Z)	0.152	J (Z)	0.718	J (Z)	1.42	J-EMPC J (Z)	0.0564	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.34	U	4.88	U (B)	0.471	J (Z)	0.674	J-EMPC J (Z)	0.797	J (Z)	3.43	J (Z)	5.02	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.34	U (B)	0.535	J (Z)	1.75	J (Z)	2.04	J (Z)	4.21	J (Z)	25.1		0.223	J-EMPC J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.34	U (B)	4.88	J-EMPC U (B)	0.696	J (Z)	0.84	J (Z)	1.05	J (Z)	4.3	J (Z)	5.02	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.34	J-EMPC U (B)	1.89	J (Z)	11.8		19.3		13.5		111		1.02	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.34	U (B)	4.88	J-EMPC U (B)	0.54	J-EMPC J (Z)	0.666	J (Z)	0.811	J (Z)	3.12	J (Z)	5.02	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.34	J-EMPC U (B)	4.88	U (B)	0.32	J-EMPC J (Z)	0.195	J (Z)	0.204	J (Z)	0.898	J (Z)	5.02	U

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			Sample Name	SL-832-SA5A-SB-0.0-0.5		SL-832-SA5A-SB-4.0-5.0		SL-832-SA5A-SB-7.2-8.2		SL-833-SA5A-SB-0.0-0.5		SL-833-SA5A-SB-2.5-3.5		SL-834-SA5A-SB-0.0-0.5		SL-834-SA5A-SB-2.4-3.4	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	05/29/2013		05/29/2013		05/29/2013		05/30/2013		05/30/2013		05/30/2013		05/30/2013	
			SDG	PH042		PH042		PH042		PH043		PH043		PH043		PH043	
			Start Depth	0		4		7.2		0		2.5		0		2.4	
			End Depth	0.5		5		8.2		0.5		3.5		0.5		3.4	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.988	U	1.02	U	1.03	U	0.0601	J-EMPC J (Z)	1.02	U	1.01	U	1.03	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.58	J (Z)	0.4	J-EMPC J (Z)	0.0527	J-EMPC J (Z)	0.988	J (Z)	0.114	J (Z)	0.749	J (Z)	0.136	J (Z)
1613B	3268-87-9	OCDD	ng/kg	462		84.3		10.3	U (B)	247		10.2	U (B)	257		10.3	J-EMPC U (B)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	39.6		7.59		5.14	J-EMPC U (B)	18.5		5.09	J-EMPC U (B)	17.9		5.17	U (B)
1613B	39001-02-0	OCDF	ng/kg	39.8		6.79	J (Z)	10.3	U (B)	15.6		10.2	U (B)	15.2		10.3	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.576	J (Z)	0.141	J-EMPC J (Z)	5.14	U	0.335	J-EMPC J (Z)	5.09	U	0.227	J (Z)	5.17	U
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.348	J-EMPC J (Z)	5.08	U	5.14	U	0.305	J-EMPC J (Z)	0.0449	J-EMPC J (Z)	0.104	J-EMPC J (Z)	5.17	U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0777	J-EMPC J (Z)	1.02	U	1.03	U	0.0775	J-EMPC J (Z)	1.02	U	0.132	J-EMPC J (Z)	1.03	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.946	J (Z)	0.237	J (Z)	0.0204	J-EMPC J (Z)	0.345	J-EMPC J (Z)	0.0327	J-EMPC J (Z)	0.329	J (Z)	0.0311	J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.165	J-EMPC J (Z)	0.0575	J-EMPC J (Z)	5.14	U	0.273	J-EMPC J (Z)	0.0656	J-EMPC J (Z)	0.173	J (Z)	5.17	U
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.307	J (Z)	0.0742	J-EMPC J (Z)	0.0317	J-EMPC J (Z)	0.383	J-EMPC J (Z)	0.103	J-EMPC J (Z)	0.21	J (Z)	0.0531	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.502	J-EMPC J (Z)	0.123	J (Z)	5.14	J-EMPC U (B)	0.229	J-EMPC J (Z)	5.09	J-EMPC U (B)	0.155	J-EMPC J (Z)	5.17	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.36	J (Z)	0.366	J-EMPC J (Z)	5.14	U	0.807	J-EMPC J (Z)	0.0704	J-EMPC J (Z)	0.608	J (Z)	0.0465	J-EMPC J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.489	J (Z)	0.175	J (Z)	5.14	J-EMPC U (B)	0.274	J (Z)	5.09	J-EMPC U (B)	0.228	J (Z)	5.17	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	10.4		2.1	J (Z)	5.14	J-EMPC U (B)	4.16	J (Z)	5.09	J-EMPC U (B)	4.03	J (Z)	5.17	U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.329	J (Z)	5.08	J-EMPC U (B)	5.14	J-EMPC U (B)	0.273	J-EMPC J (Z)	5.09	J-EMPC U (B)	0.163	J (Z)	5.17	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.249	J (Z)	0.125	J-EMPC J (Z)	5.14	J-EMPC U (B)	0.232	J-EMPC J (Z)	5.09	J-EMPC U (B)	0.218	J-EMPC J (Z)	5.17	U (B)

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			Sample Name	SL-836-SA5A-SB-0.0-0.5		SL-836-SA5A-SB-2.5-3.5		SL-837-SA5A-SB-0.0-0.5		SL-1237-SA5A-SB-4.5-5.5		SL-837-SA5A-SB-4.5-5.5		SL-1238-SA5A-SB-0.0-0.5		SL-838-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		FD		N		FD		N	
			Sample Date	05/30/2013		05/30/2013		05/30/2013		05/30/2013		05/30/2013		05/31/2013		05/31/2013	
			SDG	PH043		PH043		PH043		PH043		PH043		PH044		PH044	
			Start Depth	0		2.5		0		4.5		4.5		0		0	
			End Depth	0.5		3.5		0.5		5.5		5.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.1	U	0.993	U	0.142	J-EMPC J (Z)	0.0465	J-EMPC J (FD, Z)	1.09	UJ (FD)	1.04	U	1.05	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.553	J-EMPC J (Z)	0.0783	J (Z)	4.91	J (Z)	1.59	J (FD, Z)	0.164	J (FD, Z)	0.762	J (Z)	0.67	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	253		9.93	U (B)	1670		472	J (FD)	65.8	J (FD)	49	J (FD)	24.5	J (FD, Q)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	14.4		4.96	U (B)	125		42.3	J (FD)	5.07	J (FD, Z)	4.03	J (FD, Z)	1.87	J (FD, Z)
1613B	39001-02-0	OCDF	ng/kg	6.37	J (Z)	9.93	U (B)	119		44.4	J (FD)	5.84	J (FD, Z)	1.15	J (FD, Z)	10.5	UJ (B, FD)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.213	J (Z)	4.96	U	1.87	J (Z)	0.625	J (FD, Z)	0.0963	J (FD, Z)	0.0997	J (FD, Z)	0.0479	J (FD, Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.132	J (Z)	0.0868	J-EMPC J (Z)	1.27	J-EMPC J (Z)	0.39	J (FD, Z)	0.0674	J-EMPC J (FD, Z)	5.2	J-EMPC U (B)	5.23	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.113	J (Z)	0.993	U	0.481	J (Z)	1.02	U	1.09	U	0.292	J-EMPC J (FD, Z)	1.05	UJ (FD)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.309	J (Z)	4.96	U	2.29	J (Z)	1.08	J (FD, Z)	0.2	J (FD, Z)	5.2	UJ (B, FD)	5.23	J-EMPC UJ (B, FD)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.408	J (Z)	0.0172	J-EMPC J (Z)	1.04	J (Z)	0.171	J (FD, Z)	5.44	UJ (FD)	0.451	J (FD, Z)	5.23	UJ (B, FD)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.543	J (Z)	0.0877	J-EMPC J (Z)	0.953	J-EMPC J (Z)	0.261	J (FD, Z)	0.0494	J-EMPC J (FD, Z)	0.529	J (FD, Z)	5.23	J-EMPC UJ (B, FD)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.269	J-EMPC J (Z)	4.96	J-EMPC U (B)	1.2	J (Z)	0.56	J (FD, Z)	5.44	UJ (B, FD)	0.204	J-EMPC J (FD, Z)	5.23	UJ (B, FD)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.656	J (Z)	0.092	J (Z)	3.93	J (Z)	1.27	J (FD, Z)	0.164	J (FD, Z)	0.675	J-EMPC J (Z)	0.495	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.257	J-EMPC J (Z)	4.96	U	1.41	J (Z)	0.529	J (FD, Z)	5.44	UJ (B, FD)	0.194	J-EMPC J (FD, Z)	5.23	UJ (B, FD)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	2.09	J (Z)	4.96	U (B)	27.8		11.1	J (FD)	1.28	J (FD, Z)	0.622	J (FD, Z)	0.275	J-EMPC J (FD, Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.297	J (Z)	4.96	J-EMPC U (B)	1.05	J (Z)	0.342	J (FD, Z)	5.44	J-EMPC UJ (B, FD)	5.2	UJ (B, FD)	5.23	UJ (B, FD)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.316	J (Z)	4.96	U (B)	0.406	J (Z)	0.143	J (FD, Z)	5.44	J-EMPC UJ (B, FD)	0.594	J (Z)	0.564	J-EMPC J (Z)

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letter.

			Sample Name	SL-839-SA5A-SB-0.0-0.5		SL-840-SA5A-SB-0.0-0.5		SL-841-SA5A-SB-0.0-0.5		SL-842-SA5A-SB-0.0-0.5		SL-843-SA5A-SB-0.0-0.5		SL-844-SA5A-SB-0.0-0.5		SL-845-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	05/31/2013		05/31/2013		05/31/2013		05/29/2013		05/29/2013		05/29/2013		06/07/2013	
			SDG	PH044		PH044		PH044		PH042		PH042		PH042		PH051	
			Start Depth	0		0		0		0		0		0		0	
			End Depth	0.5		0.5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0545	J-EMPC J (Z)	0.0488	J-EMPC J (Z)	0.0736	J (Z)	0.153	J (Z)	0.167	J-EMPC J (Z)	0.0459	J-EMPC J (Z)	0.0607	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.588	J-EMPC J (Z)	3.17	J (Z)	5.22	J-EMPC U (B)	17.2		0.365	J (Z)	0.448	J-EMPC J (Z)	1.38	J (Z)
1613B	3268-87-9	OCDD	ng/kg	249		2100		2.29	J (Z)	13500	J (*#)	120		57.8		568	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	16.2		135		5.22	J-EMPC U (B)	1020		10.6		5.06	J (Z)	43.6	
1613B	39001-02-0	OCDF	ng/kg	19.7		131		10.4	U (B)	1650		11.1		4.69	J (Z)	48.1	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.188	J (Z)	1.4	J (Z)	0.0576	J-EMPC J (Z)	7.66		0.22	J (Z)	0.264	J-EMPC J (Z)	0.56	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.34	U (B)	0.7	J (Z)	5.22	J-EMPC U (B)	2.26	J (Z)	0.346	J-EMPC J (Z)	0.231	J-EMPC J (Z)	0.406	J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.237	J (Z)	0.186	J-EMPC J (Z)	0.0406	J-EMPC J (Z)	0.209	J-EMPC J (Z)	1.01	U	0.0514	J-EMPC J (Z)	0.143	J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.411	J-EMPC J (Z)	3.23	J (Z)	5.22	U	30.1		0.376	J (Z)	0.218	J-EMPC J (Z)	0.969	J (Z)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.395	J (Z)	0.837	J (Z)	5.22	U	0.653	J (Z)	0.241	J (Z)	0.235	J-EMPC J (Z)	0.42	J-EMPC J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.34	U (B)	0.639	J (Z)	5.22	J-EMPC U (B)	0.597	J (Z)	0.408	J (Z)	0.38	J (Z)	0.415	J-EMPC J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.219	J-EMPC J (Z)	0.929	J (Z)	5.22	J-EMPC U (B)	7.65		0.269	J-EMPC J (Z)	0.297	J (Z)	0.847	J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.596	J-EMPC J (Z)	3.55	J (Z)	5.22	J-EMPC U (B)	19.2		0.443	J (Z)	0.355	J (Z)	1.23	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.23	J (Z)	1.33	J (Z)	5.22	J-EMPC U (B)	7.89		0.205	J (Z)	0.189	J-EMPC J (Z)	0.467	J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.07	J (Z)	27.2		5.22	U (B)	275		2.32	J (Z)	1.52	J (Z)	11.5	
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.34	U (B)	0.937	J (Z)	5.22	U (B)	6.62		0.499	J-EMPC J (Z)	0.251	J-EMPC J (Z)	0.415	J (Z)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.248	J-EMPC J (Z)	0.54	J (Z)	5.22	J-EMPC U (B)	0.915	J (Z)	5.07	J-EMPC U (B)	0.124	J (Z)	4.98	U (B)

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letter.

			Sample Name	SL-846-SA5A-SB-0.0-0.5		SL-847-SA5A-SB-0.0-0.5		SL-848-SA5A-SB-0.0-0.5		SL-849-SA5A-SB-0.0-0.5		SL-850-SA5A-SB-0.0-0.5		SL-851-SA5A-SB-0.0-0.5		SL-1252-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		FD	
			Sample Date	06/07/2013		06/07/2013		06/07/2013		07/29/2013		06/14/2013		07/29/2013		06/14/2013	
			SDG	PH051		PH051		PH051		PH077		PH057		PH077		PH057	
			Start Depth	0		0		0		0		0		0		0	
			End Depth	0.5		0.5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0505	J (Z)	0.0294	J-EMPC J (Z)	0.968	U	1.01	J-EMPC U (B)	1	U	0.972	J-EMPC U (B)	0.995	U
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	1.1	J (Z)	4.85	U (B)	0.787	J (Z)	5.03	U (B)	0.365	J (Z)	1.13	J (Z)	0.514	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	309		9.71	U (B)	195		5.3	J (Z)	89.8		380		88.1	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	24.3		4.85	J-EMPC U (B)	14.3		0.383	J-EMPC J (Z)	6.93		23.8		5.88	
1613B	39001-02-0	OCDF	ng/kg	21		9.71	U (B)	8.72	J (Z)	10.1	U (B)	7.65	J (Z)	13.5		2.05	J (FD, Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.403	J (Z)	0.018	J-EMPC J (Z)	0.256	J (Z)	5.03	J-EMPC U (B)	5.02	J-EMPC U (B)	0.394	J (Z)	4.97	U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.298	J (Z)	4.85	J-EMPC U (B)	4.84	J-EMPC U (B)	0.0601	J-EMPC J (Z)	5.02	J-EMPC U (B)	0.481	J-EMPC J (Z)	4.97	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.181	J (Z)	0.0286	J-EMPC J (Z)	0.185	J (Z)	0.0333	J-EMPC J (Z)	1	U	0.242	J-EMPC J (Z)	0.995	J-EMPC UJ (B, FD)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.502	J (Z)	4.85	U (B)	0.248	J (Z)	5.03	U (B)	5.02	U (B)	0.421	J-EMPC J (Z)	4.97	U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.372	J (Z)	4.85	J-EMPC U (B)	4.84	J-EMPC U (B)	5.03	J-EMPC U (B)	5.02	J-EMPC U (B)	0.476	J (Z)	4.97	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.447	J (Z)	4.85	J-EMPC U (B)	4.84	U (B)	5.03	J-EMPC U (B)	5.02	J-EMPC U (B)	0.678	J (Z)	4.97	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.268	J (Z)	4.85	U (B)	0.227	J (Z)	5.03	U	5.02	U (B)	0.347	J (Z)	0.196	J-EMPC J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.926	J (Z)	4.85	U (B)	0.709	J (Z)	5.03	J-EMPC U (B)	0.296	J (Z)	1.08	J (Z)	0.447	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.305	J (Z)	4.85	U (B)	0.207	J (Z)	5.03	J-EMPC U (B)	5.02	U (B)	0.363	J (Z)	0.182	J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	4.94	J (Z)	4.85	U (B)	2.48	J (Z)	5.03	U (B)	1.63	J (Z)	3.63	J (Z)	0.891	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.394	J (Z)	4.85	J-EMPC U (B)	0.404	J (Z)	5.03	J-EMPC U (B)	5.02	U (B)	0.369	J (Z)	4.97	U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.02	U (B)	4.85	U (B)	4.84	J-EMPC U (B)	0.252	J-EMPC J (Z)	0.141	J-EMPC J (Z)	0.359	J-EMPC J (Z)	0.279	J-EMPC J (Z)

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letter.

			Sample Name	SL-852-SA5A-SB-0.0-0.5		SL-852-SA5A-SB-4.5-5.5		SL-853-SA5A-SB-0.0-0.5		SL-853-SA5A-SB-3.5-4.5		SL-854-SA5A-SB-0.0-0.5		SL-854-SA5A-SB-4.0-5.0		SL-855-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/14/2013		06/14/2013		07/29/2013		07/29/2013		06/18/2013		06/18/2013		06/18/2013	
			SDG	PH057		PH057		PH077		PH077		PH059		PH059		PH059	
			Start Depth	0		4.5		0		3.5		0		4		0	
			End Depth	0.5		5.5		0.5		4.5		0.5		5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.998	U	1.08	U	1.01	U	1.08	J-EMPC U (B)	0.992	U	1.02	U	1.01	J-EMPC U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	0.581	J (Z)	5.4	J-EMPC U (B)	0.803	J (Z)	5.39	U (B)	0.91	J (Z)	5.1	U	1.77	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	131	J (Q)	10.6	J (Z)	212		10.8	U (B)	432		10.2	U (B)	1270	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	8.64	J (Q)	0.737	J-EMPC J (Z)	13.7		5.39	U (B)	19.1		5.1	J-EMPC U (B)	49.4	
1613B	39001-02-0	OCDF	ng/kg	3.64	J (FD, Z)	10.8	J-EMPC U (B)	5.14	J (Z)	10.8	U (B)	7	J (Z)	10.2	U (B)	13.2	
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.99	J-EMPC U (B)	5.4	U (B)	0.259	J (Z)	5.39	J-EMPC U (B)	0.26	J-EMPC J (Z)	5.1	U	0.487	J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	4.99	J-EMPC U (B)	5.4	J-EMPC U (B)	0.166	J-EMPC J (Z)	0.106	J-EMPC J (Z)	4.96	J-EMPC U (B)	5.1	J-EMPC U (B)	5.03	U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.998	UJ (B, FD)	1.08	J-EMPC U (B)	0.065	J (Z)	0.0295	J-EMPC J (Z)	0.992	J-EMPC U (B)	1.02	U	0.215	J (Z)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	4.99	U (B)	5.4	J-EMPC U (B)	0.218	J-EMPC J (Z)	5.39	J-EMPC U (B)	4.96	J-EMPC U (B)	5.1	J-EMPC U (B)	5.03	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	4.99	J-EMPC U (B)	5.4	U (B)	5.06	J-EMPC U (B)	5.39	J-EMPC U (B)	4.96	U (B)	5.1	U	0.461	J-EMPC J (Z)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.355	J-EMPC J (Z)	5.4	U (B)	0.327	J (Z)	5.39	J-EMPC U (B)	0.394	J (Z)	5.1	J-EMPC U (B)	0.48	J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	4.99	J-EMPC U (B)	5.4	J-EMPC U (B)	0.178	J (Z)	0.074	J-EMPC J (Z)	4.96	U (B)	5.1	J-EMPC U (B)	0.276	J (Z)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.539	J (Z)	5.4	J-EMPC U (B)	0.69	J (Z)	5.39	J-EMPC U (B)	0.84	J (Z)	5.1	U	1.88	J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.144	J-EMPC J (Z)	5.4	J-EMPC U (B)	5.06	U (B)	5.39	J-EMPC U (B)	0.205	J-EMPC J (Z)	5.1	J-EMPC U (B)	0.317	J-EMPC J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	1.25	J (Z)	5.4	U (B)	1.72	J (Z)	5.39	J-EMPC U (B)	1.96	J (Z)	5.1	J-EMPC U (B)	4.25	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	4.99	J-EMPC U (B)	5.4	J-EMPC U (B)	5.06	J-EMPC U (B)	5.39	U (B)	0.172	J (Z)	5.1	J-EMPC U (B)	0.316	J (Z)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.26	J-EMPC J (Z)	5.4	J-EMPC U (B)	0.254	J (Z)	5.39	J-EMPC U (B)	0.322	J-EMPC J (Z)	5.1	J-EMPC U (B)	0.335	J (Z)

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letter.

			Sample Name	SL-858-SA5A-SB-0.0-0.5		SL-859-SA5A-SB-0.0-0.5		SL-860-SA5A-SB-0.0-0.5		SL-860-SA5A-SB-4.0-5.0		SL-860-SA5A-SB-10.5-11.5		SL-861-SA5A-SB-0.0-0.5		SL-861-SA5A-SB-4.0-5.0	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/05/2013		06/19/2013		06/18/2013		06/18/2013		06/18/2013		06/05/2013		06/05/2013	
			SDG	PH047		PH060		PH059		PH059		PH059		PH047		PH047	
			Start Depth	0		0		0		4		10.5		0		4	
			End Depth	0.5		0.5		0.5		5		11.5		0.5		5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	2.23		0.723	J-EMPC J (Z)	1.02	U	1.06	U	0.996	U	0.324	J (Z)	1.05	U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	105		19.9		0.537	J-EMPC J (Z)	5.31	J-EMPC U (B)	4.98	J-EMPC U (B)	7.39		5.26	J-EMPC U (B)
1613B	3268-87-9	OCDD	ng/kg	101000	J (*#)	14700	J (*#)	168		21.3		9.96	J-EMPC U (B)	3740		14.2	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	3820	J (*#)	658		9.29		1.16	J-EMPC J (Z)	4.98	U (B)	198		1.2	J (Z)
1613B	39001-02-0	OCDF	ng/kg	839		120		3.8	J (Z)	0.421	J (Z)	9.96	J-EMPC U (B)	49.3		1.28	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	44.9		9.28		0.169	J (Z)	5.31	J-EMPC U (B)	4.98	U (B)	3.54	J (Z)	5.26	J-EMPC U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	22.8		5.54		5.1	U	5.31	U	4.98	J-EMPC U (B)	2.04	J (Z)	5.26	U
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.639	J (Z)	1.07		0.211	J (Z)	1.06	U	0.996	U	0.584	J (Z)	1.05	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	11		2.12	J (Z)	5.1	J-EMPC U (B)	5.31	J-EMPC U (B)	4.98	J-EMPC U (B)	1.02	J (Z)	5.26	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	2.16	J (Z)	2.67	J (Z)	5.1	J-EMPC U (B)	5.31	U	4.98	J-EMPC U (B)	0.68	J (Z)	5.26	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	2.82	J (Z)	1.72	J (Z)	0.424	J (Z)	5.31	U (B)	4.98	U (B)	1.23	J (Z)	5.26	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.11		1.58	J (Z)	5.1	J-EMPC U (B)	5.31	J-EMPC U (B)	4.98	J-EMPC U (B)	0.835	J (Z)	5.26	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	144		24.5		0.541	J (Z)	5.31	J-EMPC U (B)	4.98	U	7.31		5.26	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	7.32		2.01	J (Z)	5.1	J-EMPC U (B)	5.31	U (B)	4.98	U (B)	1.04	J (Z)	5.26	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	201		35.6		1.13	J (Z)	0.203	J (Z)	4.98	J-EMPC U (B)	16.2		0.399	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	15.2		2.93	J (Z)	5.1	U (B)	5.31	J-EMPC U (B)	4.98	J-EMPC U (B)	1.25	J (Z)	5.26	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.07	U	1.04	J (Z)	0.26	J (Z)	5.31	J-EMPC U (B)	4.98	U (B)	0.537	J (Z)	5.26	J-EMPC U (B)

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at the beginning of Appendix A. The letters in parenthesis can vary and there can be mor
letter.

			Sample Name	SL-861-SA5A-SB-7.0-8.0		SL-862-SA5A-SB-0.0-0.5		SL-862-SA5A-SB-4.5-5.5		SL-863-SA5A-SB-0.0-0.5		SL-863-SA5A-SB-4.0-5.0		SL-864-SA5A-SB-0.0-0.5		SL-864-SA5A-SB-4.0-5.0	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/05/2013		06/06/2013		06/06/2013		06/19/2013		06/19/2013		06/18/2013		06/18/2013	
			SDG	PH047		PH050		PH050		PH060		PH060		PH059		PH059	
			Start Depth	7		0		4.5		0		4		0		4	
			End Depth	8		0.5		5.5		0.5		5		0.5		5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	1.1	J-EMPC U (B)	0.261	J-EMPC J (Z)	0.0519	J-EMPC J (Z)	0.0892	J (Z)	1.03	U	1.01	U	1.06	J-EMPC U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.49	J-EMPC U (B)	4.99		5.07	J-EMPC U (B)	2.09	J (Z)	0.262	J (Z)	2.42	J (Z)	0.245	J-EMPC J (Z)
1613B	3268-87-9	OCDD	ng/kg	7.57	J (Z)	2060		23.4		973		40		1120		23.4	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	0.613	J (Z)	132		1.58	J (Z)	58.9		2.79	J (Z)	71.3		1.67	J (Z)
1613B	39001-02-0	OCDF	ng/kg	11	U (B)	28.4		10.1	J-EMPC U (B)	14.6		0.684	J (Z)	16.7		0.401	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.49	J-EMPC U (B)	2.24	J (Z)	0.181	J-EMPC J (Z)	0.955	J (Z)	0.0605	J-EMPC J (Z)	1.22	J (Z)	5.3	J-EMPC U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.49	U	1.35	J (Z)	0.416	J-EMPC J (Z)	0.764	J-EMPC J (Z)	0.0448	J-EMPC J (Z)	0.658	J-EMPC J (Z)	5.3	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	1.1	U	0.948	J (Z)	0.121	J-EMPC J (Z)	0.398	J (Z)	1.03	U	0.411	J (Z)	1.06	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.49	U (B)	0.82	J (Z)	5.07	J-EMPC U (B)	0.352	J (Z)	5.15	J-EMPC U (B)	0.473	J (Z)	5.3	U
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.49	J-EMPC U (B)	4.96	J-EMPC U (B)	0.328	J (Z)	0.781	J (Z)	5.15	J-EMPC U (B)	0.87	J (Z)	5.3	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.49	J-EMPC U (B)	1.25	J (Z)	0.492	J (Z)	0.726	J (Z)	5.15	U (B)	0.745	J (Z)	5.3	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.49	U	0.868	J (Z)	0.222	J-EMPC J (Z)	0.432	J (Z)	5.15	J-EMPC U (B)	0.468	J-EMPC J (Z)	5.3	U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.49	U (B)	5.36		5.07	J-EMPC U (B)	2.35	J (Z)	0.19	J (Z)	2.95	J (Z)	5.3	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.49	J-EMPC U (B)	0.934	J (Z)	0.159	J (Z)	0.484	J (Z)	0.0396	J-EMPC J (Z)	0.514	J-EMPC J (Z)	5.3	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.49	U (B)	10.8		5.07	U (B)	6.3		0.335	J-EMPC J (Z)	7.32		0.224	J-EMPC J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.49	J-EMPC U (B)	1.03	J (Z)	0.231	J (Z)	0.482	J (Z)	5.15	J-EMPC U (B)	0.555	J-EMPC J (Z)	5.3	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.49	J-EMPC U (B)	4.96	U	5.07	J-EMPC U (B)	0.326	J (Z)	0.182	J-EMPC J (Z)	0.365	J-EMPC J (Z)	5.3	U (B)

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			Sample Name	SL-865-SA5A-SB-0.0-0.5		SL-865-SA5A-SB-4.0-5.0		SL-865-SA5A-SB-9.0-10.0		SL-866-SA5A-SB-0.0-0.5		SL-866-SA5A-SB-5.5-6.5		SL-867-SA5A-SB-0.0-0.5		SL-867-SA5A-SB-3.5-4.5	
			Sample Type	N		N		N		N		N		N		N	
			Sample Date	06/19/2013		06/19/2013		06/19/2013		06/19/2013		06/19/2013		06/20/2013		06/20/2013	
			SDG	PH060		PH060		PH060		PH060		PH060		PH061		PH061	
			Start Depth	0		4		9		0		5.5		0		3.5	
			End Depth	0.5		5		10		0.5		6.5		0.5		4.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0853	J-EMPC J (Z)	0.998	U	1.07	U	0.0781	J (Z)	1.01	U	0.0729	J-EMPC J (Z)	0.0288	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	2.48	J (Z)	0.352	J (Z)	5.34	U (B)	0.971	J-EMPC J (Z)	0.155	J-EMPC J (Z)	2.78	J (Z)	0.21	J (Z)
1613B	3268-87-9	OCDD	ng/kg	1610		70.5		10.7	U (B)	588		50.6		2230		114	
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	146		4.15	J (Z)	5.34	U (B)	38.3		4.15	J (Z)	125		5.45	
1613B	39001-02-0	OCDF	ng/kg	11.1		2.51	J (Z)	10.7	J-EMPC U (B)	6.8	J (Z)	0.782	J (Z)	27.9		1.28	J (Z)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.87	J (Z)	0.089	J-EMPC J (Z)	0.0489	J-EMPC J (Z)	0.497	J (Z)	0.109	J (Z)	1.74	J (Z)	0.0955	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.524	J-EMPC J (Z)	0.0742	J-EMPC J (Z)	0.105	J-EMPC J (Z)	0.249	J (Z)	0.065	J-EMPC J (Z)	0.746	J-EMPC J (Z)	0.0489	J (Z)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.27	J (Z)	0.998	J-EMPC U (B)	1.07	J-EMPC U (B)	1.03	U (B)	1.01	U	0.328	J (Z)	0.983	U (B)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.591	J-EMPC J (Z)	4.99	J-EMPC U (B)	5.34	J-EMPC U (B)	0.23	J (Z)	5.03	U (B)	0.867	J (Z)	4.91	U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	1.29	J (Z)	0.353	J-EMPC J (Z)	5.34	J-EMPC U (B)	0.506	J (Z)	5.03	J-EMPC U (B)	0.702	J (Z)	4.91	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.877	J (Z)	0.355	J-EMPC J (Z)	0.118	J-EMPC J (Z)	0.389	J (Z)	5.03	J-EMPC U (B)	0.958	J (Z)	0.138	J (Z)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.815	J (Z)	4.99	J-EMPC U (B)	5.34	U (B)	0.275	J (Z)	5.03	J-EMPC U (B)	0.852	J (Z)	4.91	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	4.94	J (Z)	0.31	J-EMPC J (Z)	0.0932	J (Z)	1.28	J (Z)	0.191	J-EMPC J (Z)	3.73	J (Z)	0.227	J-EMPC J (Z)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	1.07	J (Z)	0.132	J-EMPC J (Z)	0.0525	J-EMPC J (Z)	0.323	J (Z)	0.0561	J-EMPC J (Z)	0.978	J (Z)	0.0594	J-EMPC J (Z)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	9.09		0.87	J (Z)	0.0695	J-EMPC J (Z)	5.05	J (Z)	0.483	J (Z)	21.4		0.869	J (Z)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	0.968	J (Z)	4.99	J-EMPC U (B)	0.107	J (Z)	0.344	J (Z)	5.03	J-EMPC U (B)	1.24	J (Z)	0.115	J-EMPC J (Z)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	0.666	J (Z)	0.207	J (Z)	0.069	J (Z)	0.329	J (Z)	0.0722	J (Z)	5.09	J-EMPC U	0.147	J-EMPC J (Z)

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letter.

			Sample Name	SL-868-SA5A-SB-0.0-0.5		SL-868-SA5A-SB-4.0-5.0		SL-869-SA5A-SB-0.0-0.5		SL-870-SA5A-SB-0.0-0.5		SL-1271-SA5A-SB-0.0-0.5		SL-871-SA5A-SB-0.0-0.5		SL-872-SA5A-SB-0.0-0.5	
			Sample Type	N		N		N		N		FD		N		N	
			Sample Date	06/20/2013		06/20/2013		06/14/2013		06/14/2013		06/06/2013		06/06/2013		06/06/2013	
			SDG	PH061		PH061		PH057		PH057		PH050		PH050		PH050	
			Start Depth	0		4		0		0		0		0		0	
			End Depth	0.5		5		0.5		0.5		0.5		0.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit														
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.167	J-EMPC J (Z)	1.02	U	0.989	U	1.02	U	1	U	1.02	U	0.0305	J-EMPC J (Z)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	2.48	J (Z)	0.221	J-EMPC J (Z)	4.94	J-EMPC U (B)	0.653	J (Z)	0.523	J (FD, Z)	0.31	J-EMPC J (FD, Z)	5.09	U (B)
1613B	3268-87-9	OCDD	ng/kg	2300		74.9		4.42	J (Z)	101		109	J (FD)	19.8	J (FD, Q)	10.2	U (B)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	127		4.93	J (Z)	4.94	J-EMPC U (B)	7.45		7.78	J (FD)	1.67	J (FD, Z)	5.09	J-EMPC U (B)
1613B	39001-02-0	OCDF	ng/kg	25.8		0.918	J (Z)	9.89	J-EMPC U (B)	5.52	J (Z)	7.71	J (FD, Z)	1.54	J (FD, Z)	10.2	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	1.64	J (Z)	0.087	J (Z)	4.94	U (B)	5.08	U	0.15	J-EMPC J (FD, Z)	0.0394	J-EMPC J (FD, Z)	0.027	J-EMPC J (Z)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	0.618	J (Z)	0.0377	J-EMPC J (Z)	4.94	J-EMPC U (B)	5.08	J-EMPC U (B)	5	J-EMPC U (B)	5.09	U (B)	5.09	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.218	J (Z)	1.02	J-EMPC U (B)	0.989	U	1.02	J-EMPC U (B)	0.0807	J (FD, Z)	1.02	UJ (FD)	1.02	U
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	0.848	J (Z)	5.11	J-EMPC U (B)	4.94	J-EMPC U (B)	5.08	U (B)	5	UJ (B, FD)	5.09	UJ (B, FD)	5.09	U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	0.426	J (Z)	5.11	J-EMPC U (B)	4.94	U	5.08	J-EMPC U (B)	5	UJ (B, FD)	5.09	J-EMPC UJ (B, FD)	5.09	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	0.997	J (Z)	0.113	J-EMPC J (Z)	4.94	J-EMPC U (B)	5.08	U (B)	5	U (B)	5.09	J-EMPC U (B)	5.09	J-EMPC U (B)
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	0.816	J (Z)	5.11	J-EMPC U (B)	4.94	J-EMPC U (B)	5.08	U (B)	0.241	J (FD, Z)	5.09	UJ (B, FD)	5.09	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	3.21	J (Z)	0.193	J-EMPC J (Z)	4.94	J-EMPC U (B)	0.568	J (Z)	0.42	J (Z)	0.259	J-EMPC J (Z)	5.09	J-EMPC U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	0.996	J (Z)	0.0641	J-EMPC J (Z)	4.94	J-EMPC U (B)	0.169	J (Z)	0.15	J (FD, Z)	5.09	J-EMPC UJ (B, FD)	5.09	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	18.6		0.636	J-EMPC J (Z)	4.94	U (B)	1.52	J (Z)	2.22	J (FD, Z)	0.466	J (FD, Z)	5.09	U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	1.18	J (Z)	5.11	J-EMPC U (B)	4.94	U	5.08	U (B)	5	J-EMPC UJ (B, FD)	5.09	UJ (B, FD)	5.09	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5	U	0.111	J (Z)	0.207	J-EMPC J (Z)	0.253	J (Z)	5	U (B)	5.09	U (B)	5.09	U (B)

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letter.

			Sample Name	SL-872-SA5A-SB-2.5-3.5		SL-873-SA5A-SB-0.0-0.5	
			Sample Type	N		N	
			Sample Date	06/06/2013		06/06/2013	
			SDG	PH050		PH050	
			Start Depth	2.5		0	
			End Depth	3.5		0.5	
Analytic Method	CAS Number	Chemical Name	Unit				
1613B	1746-01-6	2,3,7,8-TCDD	ng/kg	0.0345	J (Z)	1.09	J-EMPC U (B)
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	ng/kg	5.16	J-EMPC U (B)	0.508	J (Z)
1613B	3268-87-9	OCDD	ng/kg	10.3	U (B)	5.94	J (Z)
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	ng/kg	5.16	J-EMPC U (B)	5.43	U (B)
1613B	39001-02-0	OCDF	ng/kg	10.3	U (B)	10.9	J-EMPC U (B)
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	0.0838	J-EMPC J (Z)	5.43	J-EMPC U (B)
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	ng/kg	5.16	J-EMPC U (B)	5.43	J-EMPC U (B)
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	ng/kg	0.0446	J-EMPC J (Z)	1.09	J-EMPC U (B)
1613B	55673-89-7	1,2,3,4,7,8,9-HPCDF	ng/kg	5.16	J-EMPC U (B)	5.43	J-EMPC U (B)
1613B	57117-31-4	2,3,4,7,8-PECDF	ng/kg	5.16	U (B)	5.43	J-EMPC U (B)
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	5.16	J-EMPC U (B)	5.43	U
1613B	57117-44-9	1,2,3,6,7,8-HXCDF	ng/kg	5.16	J-EMPC U (B)	5.43	J-EMPC U (B)
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	ng/kg	5.16	J-EMPC U (B)	5.43	U (B)
1613B	60851-34-5	2,3,4,6,7,8-HXCDF	ng/kg	5.16	U (B)	5.43	J-EMPC U (B)
1613B	67562-39-4	1,2,3,4,6,7,8-HPCDF	ng/kg	5.16	U (B)	5.43	U (B)
1613B	70648-26-9	1,2,3,4,7,8-HXCDF	ng/kg	5.16	J-EMPC U (B)	5.43	J-EMPC U (B)
1613B	72918-21-9	1,2,3,7,8,9-HXCDF	ng/kg	5.16	J-EMPC U (B)	5.43	U (B)

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letter.

			Sample Name	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-634-SA5A-SB-0.0-0.5	SL-1015-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	FD
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/11/2013	11/25/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH125	PH134
			Start Depth	0	9	11	11	14	0	0
			End Depth	0.5	10	12	12	15	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8315A	50-00-0	Formaldehyde	µg/kg	2200 U	9200	13000	14000 J S	2200 UJ H	2000 U	2100 U

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			Sample Name	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0
			Sample Type	N	N	FD	N	N	N
			Sample Date	11/25/2013	11/25/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013
			SDG	PH134	PH134	PH054	PH054	PH054	PH054
			Start Depth	0	6	0	0	0	5
			End Depth	0.5	7	0.5	0.5	0.5	6
Analytic Method	CAS Number	Chemical Name	Unit						
8315A	50-00-0	Formaldehyde	µg/kg	20000 U	2100 U	2100 U	2000 U	2000 U	2100 U

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			Sample Name	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5
			Sample Type	N	FD
			Sample Date	11/22/2013	11/22/2013
			SDG	PH133	PH133
			Start Depth	0	0
			End Depth	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit		
8151A	120-36-5	Dichlorprop	µg/kg	17 U	18 U
8151A	1918-00-9	Dicamba	µg/kg	12 U	12 U
8151A	75-99-0	2,2-Dichlor-Propionic Acid	µg/kg	180 U	240 U
8151A	88-85-7	Dinitrobutyl Phenol	µg/kg	24 U	25 U
8151A	93-65-2	MCPP	µg/kg	2500 U	2600 U
8151A	93-72-1	Silvex (2,4,5-TP)	µg/kg	1.7 U	1.8 U
8151A	93-76-5	2,4,5-T	µg/kg	1.7 U	1.8 U
8151A	94-74-6	MCPA	µg/kg	2500 U	2600 U
8151A	94-75-7	2,4-D	µg/kg	36 U	37 U
8151A	94-82-6	2,4-DB	µg/kg	17 U	18 U

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			Sample Name	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-634-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013	11/11/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH132	PH132	PH125
			Start Depth	0	9	11	11	14	0	4	0
			End Depth	0.5	10	12	12	15	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	0.43 R E, Q	0.41 J E, Q, Z	1.3 J FD, E, Q	0.33 J FD, E, Q, Z	0.44 J E, Q, Z	0.31 J Z	0.43 U	0.28 J Z

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			Sample Name	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0
			Sample Type	FD	N	N	FD	N	N	N
			Sample Date	11/25/2013	11/25/2013	11/25/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013
			SDG	PH134	PH134	PH134	PH054	PH054	PH054	PH054
			Start Depth	0	0	6	0	0	0	5
			End Depth	0.5	0.5	7	0.5	0.5	0.5	6
Analytic Method	CAS Number	Chemical Name	Unit							
7199	18540-29-9	Chromium (Hexavalent Compounds)	mg/kg	3.1 J FD	1.1 J FD	0.47	0.27 J FD, E, Z	0.49 J FD, E	0.54 J E	0.49 J E

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			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7
			End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0148 J Z	0.0169 U	0.0179 U	0.0183 U	0.0185 U	0.0183 U	0.0157 J Z	0.0127 J Z

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			Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
			SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129
			Start Depth	10	15	0	9	11	11	14
			End Depth	11	16	0.5	10	12	12	15
Analytic Method	CAS Number	Chemical Name	Unit							
7471B	7439-97-6	Mercury	mg/kg	0.0184 U	0.0184 J Z	0.0167 U	0.0125 J Z	0.0171 U	0.0179 U	0.0181 U

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			Sample Name	SL-584-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-631-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	11/25/2013	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/25/2013
			SDG	PH134	PH132	PH132	PH136	PH126	PH126	PH126	PH134
			Start Depth	0	0	4	0	0	0	6.5	0
			End Depth	0.5	0.5	5	0.5	0.5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0108 J Z	0.0164 J Z	0.0209	0.036	0.247	0.181	0.0138 J Z	0.0164 J Z

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			Sample Name	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	11/11/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH125	PH128	PH128	PH128	PH128	PH128	PH128	PH128
			Start Depth	0	0	3	3	0	4	7	0
			End Depth	0.5	0.5	4	4	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0165 U	0.0278	0.0169 U	0.0168 U	0.0163 U	0.0173 U	0.0174 U	0.0169 U

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			Sample Name	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/22/2013	11/22/2013	11/22/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH133	PH133	PH133
			Start Depth	4	7	0	3	0	0	4	10.5
			End Depth	5	8	0.5	4	0.5	0.5	5	11.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0110 J Z	0.0118 J Z	0.0171 U	0.0169 U	0.0161 U	0.0175	0.0141 J Z	0.0188 U

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			Sample Name	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	FD
			Sample Date	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013	11/18/2013	11/18/2013	11/19/2013
			SDG	PH133	PH133	PH136	PH133	PH133	PH131	PH131	PH132
			Start Depth	0	4	0	0	0	0	4	0
			End Depth	0.5	5	0.5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0113 J Z	0.0112 J Z	0.0378	0.0168 U	0.0164 U	0.0366	0.0172 U	0.0441 J FD

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			Sample Name	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013
			SDG	PH132	PH132	PH131	PH131	PH131	PH131	PH131	PH135
			Start Depth	0	4	0	4	4	8	0	0
			End Depth	0.5	5	0.5	5	5	9	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0113 J FD, Z	0.0165 J Z	0.0164 U	0.0166 U	0.0168 U	0.0172 U	0.0160 U	0.0159 J Z

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			Sample Name	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/18/2013	11/26/2013
			SDG	PH135	PH134	PH134	PH134	PH135	PH135	PH131	PH135
			Start Depth	2.5	0	0	6	0	0	0	0
			End Depth	3.5	0.5	0.5	7	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0134 J Z	0.0276	0.0398	0.0172 U	0.288	0.0164 U	0.0167 U	0.0110 J Z

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			Sample Name	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/26/2013
			SDG	PH132	PH131	PH131	PH131	PH131	PH135	PH135	PH135
			Start Depth	0	0	2.5	0	3	0	3	0
			End Depth	0.5	0.5	3.5	0.5	4	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0121 J Z	0.0163 U	0.0216	0.0168 U	0.0179 U	0.0243	0.0222	0.0104 J Z

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			Sample Name	SL-767-SA5A-SB-2.5-3.5	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0
			Sample Type	N	N	N	FD	N	N	N	FD
			Sample Date	11/26/2013	06/04/2013	06/10/2013	06/10/2013	06/10/2013	06/13/2013	06/10/2013	06/10/2013
			SDG	PH135	PH047	PH052	PH052	PH052	PH056	PH052	PH052
			Start Depth	2.5	0	0	0	0	0	0	6
			End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0111 J Z	0.025	0.0187	0.0114 J Z	0.0125 J Z	0.0111 J Z	0.0165 U	0.0179 U

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			Sample Name	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	06/10/2013	06/10/2013	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013
			SDG	PH052	PH053	PH053	PH058	PH058	PH058	PH055	PH055
			Start Depth	6	0	0	0	3	3	0	2
			End Depth	7	0.5	0.5	0.5	4	4	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0177 U	0.0167 U	0.0167 U	0.0139 J Z	0.0172 U	0.0165 U	0.0165 U	0.0172 U

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			Sample Name	SL-782-SA5A-SB-0.0-0.5	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013
			SDG	PH055	PH055	PH054	PH054	PH055	PH055	PH054	PH054
			Start Depth	0	4.5	0	0	0	2.5	0	0
			End Depth	0.5	5.5	0.5	0.5	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0169 U	0.0112 J Z	0.0171 UJ FD	0.0214 J FD	0.0166 U	0.0171 U	0.0115 J Z	0.0169 U

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			Sample Name	SL-787-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013
			SDG	PH054	PH054	PH054	PH054	PH056	PH056	PH056	PH056
			Start Depth	0	0	0	5	0	0	0	0
			End Depth	0.5	0.5	0.5	6	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0166 U	0.0131 J Z	0.0120 J Z	0.0175 U	0.0103 J Z	0.0165 U	0.0167 U	0.0105 J Z

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			Sample Name	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/13/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	05/31/2013	05/30/2013
			SDG	PH056	PH047	PH047	PH047	PH047	PH047	PH044	PH043
			Start Depth	0	0	5.5	0	0	4	0	0
			End Depth	0.5	0.5	6.5	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0122 J Z	0.0128 J Z	0.0121 J Z	0.0173	0.0118 J Z	0.0105 J Z	0.0158 J Z	0.0162 U

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			Sample Name	SL-819-SA5A-SB-6.5-7.5	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/30/2013	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH043	PH058	PH058	PH058	PH058	PH055	PH055	PH055
			Start Depth	6.5	0	0	0	0	0	4	9
			End Depth	7.5	0.5	0.5	0.5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0304	0.0163 U	0.0120 J Z	0.0107 J Z	0.0155 J Z	0.0160 U	0.0179 U	0.0169 U

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			Sample Name	SL-826-SA5A-SB-14.0-15.0	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5	SL-832-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/12/2013	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013	05/29/2013
			SDG	PH055	PH051	PH041	PH041	PH041	PH042	PH042	PH042
			Start Depth	14	0	0	0	2.75	0	4.5	0
			End Depth	15	0.5	0.5	0.5	3.75	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0170 U	0.0144 J Z	0.0108 J Z	0.0118 J Z	0.0164 U	0.0110 J Z	0.0168 U	0.0109 J Z

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			Sample Name	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
			SDG	PH042	PH042	PH043	PH043	PH043	PH043	PH043	PH043
			Start Depth	4	7.199999809	0	2.5	0	2.400000095	0	2.5
			End Depth	5	8.199999809	0.5	3.5	0.5	3.400000095	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0102 J Z	0.0165 U	0.0165 U	0.0165 U	0.0165 U	0.0162 U	0.0187 U	0.0171 U

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			Sample Name	SL-837-SA5A-SB-0.0-0.5	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	FD	N	N	N	N
			Sample Date	05/30/2013	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013
			SDG	PH043	PH043	PH043	PH044	PH044	PH044	PH044	PH044
			Start Depth	0	4.5	4.5	0	0	0	0	0
			End Depth	0.5	5.5	5.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0150 J Z	0.0112 J Z	0.0153 J Z	0.0150 J Z	0.0123 J Z	0.0173 J Z	0.0206	0.0167

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			Sample Name	SL-842-SA5A-SB-0.0-0.5	SL-844-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/29/2013	06/07/2013	06/07/2013	06/07/2013	07/29/2013	06/14/2013	07/29/2013
			SDG	PH042	PH042	PH051	PH051	PH051	PH077	PH057	PH077
			Start Depth	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0132 J Z	0.0168 U	0.0112 J Z	0.0109 J Z	0.0153 J Z	0.0160 U	0.0166 U	0.010 J Z

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			Sample Name	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	06/14/2013	06/14/2013	06/14/2013	07/29/2013	07/29/2013	06/18/2013	06/18/2013	06/18/2013
			SDG	PH057	PH057	PH057	PH077	PH077	PH059	PH059	PH059
			Start Depth	0	0	4.5	0	3.5	0	4	0
			End Depth	0.5	0.5	5.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0163 U	0.0161 U	0.0181 U	0.0159 U	0.0171 U	0.0165 U	0.0169 U	0.0122 J Z

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			Sample Name	SL-858-SA5A-SB-0.0-0.5	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/05/2013	06/19/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013	06/05/2013	06/05/2013
			SDG	PH047	PH060	PH059	PH059	PH059	PH047	PH047	PH047
			Start Depth	0	0	0	4	10.5	0	4	7
			End Depth	0.5	0.5	0.5	5	11.5	0.5	5	8
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0583	0.0401	0.0102 J Z	0.0177 U	0.0291	0.0248	0.0148 J Z	0.0174 J Z

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			Sample Name	SL-862-SA5A-SB-0.0-0.5	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/06/2013	06/06/2013	06/19/2013	06/19/2013	06/18/2013	06/18/2013	06/19/2013	06/19/2013
			SDG	PH050	PH050	PH060	PH060	PH059	PH059	PH060	PH060
			Start Depth	0	4.5	0	4	0	4	0	4
			End Depth	0.5	5.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0211	0.0170 U	0.0172 U	0.0167 U	0.0143 J Z	0.0171 U	0.0169 U	0.0166 U

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			Sample Name	SL-865-SA5A-SB-9.0-10.0	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-0.0-0.5	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/19/2013	06/19/2013	06/19/2013	06/20/2013	06/20/2013	06/20/2013	06/20/2013	06/14/2013
			SDG	PH060	PH060	PH060	PH061	PH061	PH061	PH061	PH057
			Start Depth	9	0	5.5	0	3.5	0	4	0
			End Depth	10	0.5	6.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
7471B	7439-97-6	Mercury	mg/kg	0.0177	0.0162 J Z	0.0168 U	0.0155 J Z	0.0169 U	0.0156 J Z	0.0169 U	0.0184

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			Sample Name	SL-870-SA5A-SB-0.0-0.5	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N
			Sample Date	06/14/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013
			SDG	PH057	PH050	PH050	PH050	PH050	PH050
			Start Depth	0	0	0	0	2.5	0
			End Depth	0.5	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit						
7471B	7439-97-6	Mercury	mg/kg	0.0167 U	0.0160 U	0.0169 U	0.0162 U	0.0174 U	0.0150 J Z

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(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7
			End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	13400 J E	12900 J E	13300 J E	16900 J E	16600 J E	10100 J E	12100	10900
6010C	7439-89-6	Iron	mg/kg	19400	22800	19400	19200	21200	18500	19900	17300
6010C	7439-92-1	Lead	mg/kg	6.58	14.3	6.02	6.47	6.39	4.78	7.44	5.19
6010C	7439-93-2	Lithium	mg/kg	25.5	22.9	26.1	25.6	27	24.9	22.6	24.9
6010C	7439-95-4	Magnesium	mg/kg	4430	4520	5050	4190	4820	5610	4040	3670
6010C	7439-96-5	Manganese	mg/kg	266	275	327	266	301	241	289	214
6010C	7439-98-7	Molybdenum	mg/kg	2.09 U F	2.16 U F	2.20 U F	2.18 U F	2.19 U F	2.27 U F	2.04 U F	2.19 U F
6010C	7440-02-0	Nickel	mg/kg	8.95	10.2	9.99	9.03	11.2	9.87	7.57	5.43
6010C	7440-09-7	Potassium	mg/kg	3080 J Q	3040 J Q	2820 J Q	3070 J Q	3250 J Q	2780 J Q	2720	3140
6010C	7440-23-5	Sodium	mg/kg	89.6 J Z	148	135	138	147	117	81.2 J Z	76.7 J Z
6010C	7440-31-5	Tin	mg/kg	10.5 U B	10.8 U B	11.0 U B	10.9 U B	10.9 U B	11.3 U B	10.2 U B	11.0 U B
6010C	7440-32-6	Titanium	mg/kg	1090	1090	1200	1150	1160	1010	1050	1000
6010C	7440-36-0	Antimony	mg/kg	4.18 UJ Q	4.32 UJ Q	4.39 UJ Q	4.36 UJ Q	4.38 UJ Q	4.54 UJ Q	4.08 UJ Q	4.38 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.23	5.14	6.06	4.78	5.02	4.69	4.6	3.22 J Z
6010C	7440-39-3	Barium	mg/kg	78.7	87.6	78	89.5	103	62.5	82	81.8
6010C	7440-41-7	Beryllium	mg/kg	0.502 J Z	0.454 J Z	0.513 J Z	0.619 J Z	0.632 J Z	0.401 J Z	0.480 J Z	0.422 J Z
6010C	7440-42-8	Boron	mg/kg	2.33 J Z	2.62 J Z	2.38 J Z	3.21 J Z	3.35 J Z	2.32 J Z	2.91 J Z	3.17 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.05 U	0.113 J Z	1.10 U	1.09 U	1.09 U	1.13 U	0.201 J Z	0.180 J Z
6010C	7440-47-3	Chromium	mg/kg	15.4	17.7	19.5	15.1	18.1	17.6	17.1	12.1
6010C	7440-48-4	Cobalt	mg/kg	4.75	5.04	4.84	4.79	5.88	5	4.56	3.97
6010C	7440-50-8	Copper	mg/kg	7.79	9.4	9.27	7.72	9.73	8.05	7.73	6.48
6010C	7440-62-2	Vanadium	mg/kg	30.8	33.8	34.2	31.8	35.3	32	30.5	25.5
6010C	7440-66-6	Zinc	mg/kg	62.2	691	53.2	54.4	59	49.7	54.4	56.2
6010C	7440-67-7	Zirconium	mg/kg	2.83 J Z	4.31 J Z	2.81 J Z	3.08 J Z	3.71 J Z	2.68 J Z	1.91 J Z	1.10 J Z
6010C	7440-70-2	Calcium	mg/kg	2640 J E	3610 J E	7570 J E	2360 J E	3590 J E	6090 J E	2660	2750
6010C	7723-14-0	Phosphorus	mg/kg	349 J Q	416 J Q	366 J Q	325 J Q	363 J Q	356 J Q	331	322
6020A	7440-22-4	Silver	mg/kg	0.0318 J Z	0.0404 J Z	0.0687 J Z	0.0362 J Z	0.0346 J Z	0.0313 J Z	0.0793 J Z	0.219 U
6020A	7440-24-6	Strontium	mg/kg	13	20.1	15.7	18.8	19.6	13.5	13.7 J Q	13.3 J Q
6020A	7440-28-0	Thallium	mg/kg	0.252	0.225	0.249	0.284	0.286	0.218 J Z	0.234	0.228
6020A	7782-49-2	Selenium	mg/kg	0.131 J Z	0.151 J Z	0.314 J Z	0.161 J Z	0.155 J Z	0.212 J Z	0.408 U	0.438 U

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				Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0
				Sample Type	N	N	N	N	N	FD	N
				Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
				SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129
				Start Depth	10	15	0	9	11	11	14
				End Depth	11	16	0.5	10	12	12	15
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	13900	12600	16900 J E	14800 J E	15500 J E	17100 J E	22800 J E	
6010C	7439-89-6	Iron	mg/kg	18800	20600	29700	18800	18600	20000	26200	
6010C	7439-92-1	Lead	mg/kg	7.67	6.04	45.1	5.55	5.84	5.83	7.33	
6010C	7439-93-2	Lithium	mg/kg	19.3	16.7	35.3	24.3	21.2	22.2	23.5	
6010C	7439-95-4	Magnesium	mg/kg	3530	3650	6310	3990	3820	4170	4750	
6010C	7439-96-5	Manganese	mg/kg	280	130	304	253	361	326	207	
6010C	7439-98-7	Molybdenum	mg/kg	2.20 U F	2.24 U F	2.12 U F	2.14 U F	2.18 U F	2.14 U F	2.16 U F	
6010C	7440-02-0	Nickel	mg/kg	7.77	3.73	12.4	7.91	11	12.1	9.45	
6010C	7440-09-7	Potassium	mg/kg	2890	1420	3530 J Q	2700 J Q	3210 J Q	3600 J Q	1400 J Q	
6010C	7440-23-5	Sodium	mg/kg	102 J Z	134	112	141	117	120	143	
6010C	7440-31-5	Tin	mg/kg	11.0 U B	11.2 U B	10.6 U B	10.7 U B	10.9 U B	10.7 U B	10.8 U B	
6010C	7440-32-6	Titanium	mg/kg	1030	1030	1210	1070	1040	1080	1150	
6010C	7440-36-0	Antimony	mg/kg	4.40 UJ Q	4.47 UJ Q	4.23 UJ Q	4.29 UJ Q	4.36 UJ Q	4.27 UJ Q	4.31 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	3.69 J Z	6.53	11.4	4.15 J Z	4.30 J Z	4.68	6.69	
6010C	7440-39-3	Barium	mg/kg	112	59.9	105	81.4	104	123	97.3	
6010C	7440-41-7	Beryllium	mg/kg	0.542 J Z	0.570 J Z	0.847 J Z	0.549 J Z	0.562 J Z	0.636 J Z	0.807 J Z	
6010C	7440-42-8	Boron	mg/kg	4.02 J Z	2.53 J Z	2.92 J Z	2.39 J Z	3.94 J Z	3.65 J Z	2.70 J Z	
6010C	7440-43-9	Cadmium	mg/kg	0.246 J Z	0.110 J Z	1.06 U	1.07 U	1.09 U	1.07 U	1.08 U	
6010C	7440-47-3	Chromium	mg/kg	15.7	15.4	21	14.3	16.6	18.4	20.6	
6010C	7440-48-4	Cobalt	mg/kg	5.23	2.68	5.57	4.4	5.48	5.66	4.45	
6010C	7440-50-8	Copper	mg/kg	10.1	4.37	14.9	6.59	9.57	12.2	7.21	
6010C	7440-62-2	Vanadium	mg/kg	30	41.3	42.4	30.2	30.9	34	46.4	
6010C	7440-66-6	Zinc	mg/kg	53.5	33.8	73.6	49.3	53.7	57.7	43.1	
6010C	7440-67-7	Zirconium	mg/kg	1.99 J Z	5.59 U	3.39 J Z	2.81 J Z	3.91 J Z	4.14 J Z	4.06 J Z	
6010C	7440-70-2	Calcium	mg/kg	2050	1940	4190 J E	2810 J E	2250 J E	2330 J E	3400 J E	
6010C	7723-14-0	Phosphorus	mg/kg	319	119	423 J Q	266 J Q	340 J Q	396 J Q	233 J Q	
6020A	7440-22-4	Silver	mg/kg	0.0341 J Z	0.224 U	0.212 U	0.0281 J Z	0.0438 J Z	0.0344 J Z	0.0550 J Z	
6020A	7440-24-6	Strontium	mg/kg	23.0 J Q	19.3 J Q	19.8	18.9	22.1	24.4	25.2	
6020A	7440-28-0	Thallium	mg/kg	0.253	0.229	0.288	0.256	0.254	0.277	0.233	
6020A	7782-49-2	Selenium	mg/kg	0.440 U	0.447 U	0.154 J Z	0.138 J Z	0.153 J Z	0.157 J Z	0.208 J Z	

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				Sample Name	SL-584-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-631-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	11/25/2013	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/25/2013
				SDG	PH134	PH132	PH132	PH136	PH126	PH126	PH126	PH134
				Start Depth	0	0	4	0	0	0	6.5	0
				End Depth	0.5	0.5	5	0.5	0.5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	14500	12900	18800	13800	10400 J E	10100 J E	20200 J E	15100
6010C	7439-89-6	Iron	mg/kg	20100	18400	31800	20000	17800 J E	18500 J E	31500 J E	21700
6010C	7439-92-1	Lead	mg/kg	6.2	6.62	9.89	5.23	7.32	9.34	12.1	20.1
6010C	7439-93-2	Lithium	mg/kg	23.6	20.3	29.3	17.3	24.2 J E	23.6 J E	26.4 J E	23.5
6010C	7439-95-4	Magnesium	mg/kg	4430	3630	6440	4550	3750 J E	3770 J E	6770 J E	4790
6010C	7439-96-5	Manganese	mg/kg	294	271	337	241	266 J E	263 J E	355 J E	290
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F	2.07 U F	2.13 U F	2.03 U F	1.99 UJ F, FD	2.01 UJ F, FD	2.12 U F	2.02 U F
6010C	7440-02-0	Nickel	mg/kg	10.9	7.71	15.2	14.1	6.77	6	14.7	13.7
6010C	7440-09-7	Potassium	mg/kg	3420 J Q	2930	1960	2870 J Q	3340 J E, Q	3300 J E, Q	2630 J E, Q	3570 J Q
6010C	7440-23-5	Sodium	mg/kg	88.1 J Z	79.0 J Z	133	138	130	182	147	91.3 J Z
6010C	7440-31-5	Tin	mg/kg	10.1 U B	10.3 U B	10.7 U B	10.1 U B	9.97 U B	10.1 U B	10.6 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1290	1060	1220	1010	1100	1110	1370	1160
6010C	7440-36-0	Antimony	mg/kg	4.05 UJ Q	4.13 UJ Q	4.26 UJ Q	4.05 UJ Q	3.99 UJ Q	4.02 UJ Q	4.23 UJ Q	4.05 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	2.95 J Z	3.95 J Z	10.7	4.6	2.28 J Z	2.47 J Z	9.2	4.15
6010C	7440-39-3	Barium	mg/kg	89.9	91.8	129	99.8	75.6 J E	84.4 J E	122 J E	87.8
6010C	7440-41-7	Beryllium	mg/kg	0.605 J Z	0.491 J Z	0.987 J Z	0.502 J Z	0.310 J Z	0.270 J Z	0.684 J Z	0.643 J Z
6010C	7440-42-8	Boron	mg/kg	1.60 J Z	3.77 J Z	3.80 J Z	1.74 J Z	4.03 J Z	3.17 J Z	4.44 J Z	10.1 U
6010C	7440-43-9	Cadmium	mg/kg	1.01 U	0.239 J Z	0.226 J Z	1.01 U	0.514 J Z	0.471 J Z	0.306 J Z	1.01 U
6010C	7440-47-3	Chromium	mg/kg	17.4	19.7	31	21.8	14.2	12.9	28.1	22
6010C	7440-48-4	Cobalt	mg/kg	4.55	4.88	7.85	4.88	3.31	3.23	6.91	5.42
6010C	7440-50-8	Copper	mg/kg	17	8.64	17.2	18.8	10.6 J E	6.53 J E	17.3 J E	18.1
6010C	7440-62-2	Vanadium	mg/kg	35.6	30.9	53.2	44.9	25.5 J E	26.8 J E	49.3 J E	39.7
6010C	7440-66-6	Zinc	mg/kg	60.5 J Q	54.6	68.8	62.6 J Q	108 J E, A	100 J E, A	77.9 J E, A	62.1 J Q
6010C	7440-67-7	Zirconium	mg/kg	3.14 J Z	1.88 J Z	5.33 U	3.98 J Z	2.58 J Z	2.71 J Z	4.60 J Z	3.50 J Z
6010C	7440-70-2	Calcium	mg/kg	2920	2370	4460	6570	6550 J E	7670 J E	4770 J E	3090
6010C	7723-14-0	Phosphorus	mg/kg	387	307	297	687	397 J Q, A	393 J Q, A	555 J Q, A	505
6020A	7440-22-4	Silver	mg/kg	0.0282 J Z	0.0358 J Z	0.0528 J Z	0.203 U	0.0309 J Z	0.0308 J Z	0.0415 J Z	0.0441 J Z
6020A	7440-24-6	Strontium	mg/kg	17.2	17.5 J Q	28.2 J Q	44.3	18.1 J Q, A	21.0 J Q, A	27.6 J Q, A	18.1
6020A	7440-28-0	Thallium	mg/kg	0.263	0.248	0.264	0.199 J Z	0.227	0.237	0.294	0.238
6020A	7782-49-2	Selenium	mg/kg	0.123 J Z	0.413 U	0.124 J Z	0.308 J Z	0.126 J FD, Z	0.402 UJ FD	0.304 J Z	0.164 J Z

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				Sample Name	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	11/11/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
				SDG	PH125	PH128	PH128	PH128	PH128	PH128	PH128	PH128
				Start Depth	0	0	3	3	0	4	7	0
				End Depth	0.5	0.5	4	4	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	10900 J E	16100	19900	19800	14500	15300	14600	18400
6010C	7439-89-6	Iron	mg/kg	18400 J E	22800 J A	26800 J A	25800 J A	20900 J A	22600 J A	22800 J A	24300 J A
6010C	7439-92-1	Lead	mg/kg	5.06	9.53	7.63	7.46	6.66	5.41	4.96	6.8
6010C	7439-93-2	Lithium	mg/kg	24.7 J E	25.1	30.3	28.6	20.2	29.2	24.6	23.8
6010C	7439-95-4	Magnesium	mg/kg	3700 J E	4840	5770	5490	4780	5030	5400	4630
6010C	7439-96-5	Manganese	mg/kg	275 J E	317	337	297	283	256	416	328
6010C	7439-98-7	Molybdenum	mg/kg	2.01 U F	2.00 U F	2.07 U F	2.05 U F	2.04 U F	2.11 U F	2.06 U F	2.01 U F
6010C	7440-02-0	Nickel	mg/kg	6.47	14.1	14.4	13.4	11.7	10.5	10.6	13.6
6010C	7440-09-7	Potassium	mg/kg	3070 J E, Q	3090	2880	2340	3100	1600	1770	2480
6010C	7440-23-5	Sodium	mg/kg	121	88.5 J Z	98.7 J Z	102	90.2 J Z	104 J Z	107	114
6010C	7440-31-5	Tin	mg/kg	10.1 U B	9.99 U B	10.3 U B	10.2 U B	10.2 U B	10.5 U B	10.3 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1130	1190	1390	1270	1040	1160	1250	1150
6010C	7440-36-0	Antimony	mg/kg	4.02 UJ Q	4.00 UJ Q	4.14 UJ Q	4.10 UJ Q	4.08 UJ Q	4.21 UJ Q	4.12 UJ Q	4.01 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	2.59 J Z	5.09	6.45	6.77	4.65	3.83 J Z	4.51	5.28
6010C	7440-39-3	Barium	mg/kg	75.3 J E	94.6	98.3	85.5	87.6	81.8	90.4	101
6010C	7440-41-7	Beryllium	mg/kg	0.326 J Z	0.581 J Z	0.687 J Z	0.680 J Z	0.522 J Z	0.607 J Z	0.523 J Z	0.691 J Z
6010C	7440-42-8	Boron	mg/kg	3.86 J Z	2.86 J Z	2.32 J Z	2.42 J Z	2.98 J Z	1.75 J Z	1.89 J Z	3.72 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.304 J Z	0.127 J Z	0.0962 J FD, Z	1.02 UJ FD	0.110 J Z	1.05 U	0.0875 J Z	0.120 J Z
6010C	7440-47-3	Chromium	mg/kg	13.6	22.3	23.2	23.5	19.7	19.4	19.7	22.9
6010C	7440-48-4	Cobalt	mg/kg	3.43	5.7	6.3	6.19	6.13	5.53	6.2	5.96
6010C	7440-50-8	Copper	mg/kg	6.27 J E	12.2	11.4	10	14.8	7.1	8.7	10.5
6010C	7440-62-2	Vanadium	mg/kg	25.8 J E	39.2	46.8	48.8	37.6	38.1	37.6	43.2
6010C	7440-66-6	Zinc	mg/kg	62.5 J E, A	62	60.7	55.8	53	46.9	52.4	51.7
6010C	7440-67-7	Zirconium	mg/kg	2.12 J Z	3.88 J Z	4.64 J Z	4.12 J Z	2.57 J Z	3.17 J Z	4.26 J Z	4.25 J Z
6010C	7440-70-2	Calcium	mg/kg	2670 J E	3140	3220	2960	2490	2700	3180	2430
6010C	7723-14-0	Phosphorus	mg/kg	351 J Q, A	426	448	370	397	264	363	345
6020A	7440-22-4	Silver	mg/kg	0.201 U	0.156 J Z	0.0393 J Z	0.0490 J Z	0.0291 J Z	0.211 U	0.206 U	0.0421 J Z
6020A	7440-24-6	Strontium	mg/kg	13.5 J Q, A	18.8 J Q	20.4 J Q	21.5 J Q	17.0 J Q	20.6 J Q	21.1 J Q	21.0 J Q
6020A	7440-28-0	Thallium	mg/kg	0.246	0.284	0.3	0.289	0.259	0.263	0.294	0.291
6020A	7782-49-2	Selenium	mg/kg	0.402 U	0.135 J Z	0.194 J Z	0.198 J Z	0.123 J Z	0.421 U	0.412 U	0.173 J Z

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				Sample Name	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/22/2013	11/22/2013	11/22/2013
				SDG	PH128	PH128	PH128	PH128	PH128	PH133	PH133	PH133
				Start Depth	4	7	0	3	0	0	4	10.5
				End Depth	5	8	0.5	4	0.5	0.5	5	11.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	25200	17800	13800	14400	16200	14900	19400	19500
6010C	7439-89-6	Iron	mg/kg	28000 J A	21000 J A	19100 J A	21600 J A	24000 J A	22200 J Q	23800 J Q	41100 J Q
6010C	7439-92-1	Lead	mg/kg	8.03	6.39	6.05	5.78	7.17	13.5	9.56	13.6
6010C	7439-93-2	Lithium	mg/kg	33.5	33.3	15.9	24	24.8	20	25.2	26.3
6010C	7439-95-4	Magnesium	mg/kg	5270	3710	3670	4220	5020	4260	4560	4620
6010C	7439-96-5	Manganese	mg/kg	217	138	313	158	285	358	277	228
6010C	7439-98-7	Molybdenum	mg/kg	2.21 U F	2.16 U F	2.01 U F	2.04 U F	2.04 U F	2.00 U F	2.12 U F	2.22 U F
6010C	7440-02-0	Nickel	mg/kg	14.7	9.74	12	9.16	12.8	13.1	12	11
6010C	7440-09-7	Potassium	mg/kg	1310	1380	3130	1530	2280	3500 J Q	2650 J Q	1850 J Q
6010C	7440-23-5	Sodium	mg/kg	128	108	137	308	342	110	102 J Z	111
6010C	7440-31-5	Tin	mg/kg	11.1 U B	10.8 U B	10.0 U B	10.2 U B	10.2 U B	10.0 U B	10.6 U B	11.1 U B
6010C	7440-32-6	Titanium	mg/kg	1340	1130	1050	993	1180	1110	1290	1230
6010C	7440-36-0	Antimony	mg/kg	4.42 UJ Q	4.32 UJ Q	4.01 UJ Q	4.09 UJ Q	4.07 UJ Q	4.01 UJ Q	4.25 UJ Q	4.44 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.61	5.52	4.16	5.47	6.09	5.4	5.9	16.2
6010C	7440-39-3	Barium	mg/kg	111	66.7	108	76.2	93.9	96.2	97.2	69.9
6010C	7440-41-7	Beryllium	mg/kg	0.882 J Z	0.626 J Z	0.574 J Z	0.541 J Z	0.698 J Z	0.616 J Z	0.674 J Z	1.29
6010C	7440-42-8	Boron	mg/kg	2.15 J Z	1.94 J Z	4.84 J Z	1.53 J Z	4.90 J Z	4.55 J Z	4.38 J Z	3.55 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.11 U	1.08 U	0.211 J Z	1.02 U	0.275 J Z	1.00 U	1.06 U	1.11 U
6010C	7440-47-3	Chromium	mg/kg	27	19.3	18.8	17.7	20.3	19.8	22	29.5
6010C	7440-48-4	Cobalt	mg/kg	5.96	3.24	5.71	4	6.74	6.25	5.32	4.08
6010C	7440-50-8	Copper	mg/kg	11.3	9.84	11.4	6.89	12.3	15	15	21.6
6010C	7440-62-2	Vanadium	mg/kg	51.5	39.4	34.5	34.8	40.4	39.5	41.3	70.7
6010C	7440-66-6	Zinc	mg/kg	51.4	37.8	48	44.5	66.4	68.8	58.1	45.1
6010C	7440-67-7	Zirconium	mg/kg	5.25 J Z	4.10 J Z	3.20 J Z	3.18 J Z	4.24 J Z	2.66 J Z	2.74 J Z	2.19 J Z
6010C	7440-70-2	Calcium	mg/kg	3170	2330	1580	2130	8180	2800	2480	2240
6010C	7723-14-0	Phosphorus	mg/kg	229	140	231	113	322	428 J Q	267 J Q	399 J Q
6020A	7440-22-4	Silver	mg/kg	0.0629 J Z	0.0545 J Z	0.0283 J Z	0.204 U	0.0276 J Z	0.0874 J Z	0.0846 J Z	0.0484 J Z
6020A	7440-24-6	Strontium	mg/kg	26.6 J Q	16.6 J Q	19.2 J Q	20.2 J Q	38.3 J Q	20.4	21.7	22.7
6020A	7440-28-0	Thallium	mg/kg	0.24	0.258	0.289	0.216	0.257	0.251	0.249	0.249
6020A	7782-49-2	Selenium	mg/kg	0.442 U	0.432 U	0.144 J Z	0.409 U	0.407 U	0.159 J Z	0.125 J Z	0.184 J Z

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			Sample Name	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	FD
			Sample Date	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013	11/18/2013	11/18/2013	11/19/2013
			SDG	PH133	PH133	PH136	PH133	PH133	PH131	PH131	PH132
			Start Depth	0	4	0	0	0	0	4	0
			End Depth	0.5	5	0.5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16000	24100	14300	16800	19000	14200	15200	10400
6010C	7439-89-6	Iron	mg/kg	20500 J Q	27600 J Q	19300	22100 J Q	22700 J Q	18400	22600	15700
6010C	7439-92-1	Lead	mg/kg	12	8.56	10.3	5.87	8.45	7.69	6.45	17.6 J FD
6010C	7439-93-2	Lithium	mg/kg	19.5	30	21.4	23.4	20.2	18.6	29	14.8
6010C	7439-95-4	Magnesium	mg/kg	3910	5090	4150	4710	4300	3800	5050	3370
6010C	7439-96-5	Manganese	mg/kg	346	283	295	316	321	274	246	255
6010C	7439-98-7	Molybdenum	mg/kg	2.02 U F	2.17 U F	2.01 U F	2.03 UJ F, FD	2.00 UJ F, FD	2.03 U F	2.04 U F	2.01 UJ F, FD
6010C	7440-02-0	Nickel	mg/kg	12.9	13.7	11	12.3	13	10.1	8.79	7.6
6010C	7440-09-7	Potassium	mg/kg	3600 J Q	1730 J Q	3990 J Q	3410 J Q	3110 J Q	3440 J Q	1480 J Q	3090
6010C	7440-23-5	Sodium	mg/kg	103	97.5 J Z	96.7 J Z	124	171	137	114	61.6 J Z
6010C	7440-31-5	Tin	mg/kg	10.1 U B	10.8 U B	10.1 U B	10.1 U B	9.98 U B	10.1 U B	10.2 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1180	1380	1180	1260	1290	1080	1090	860
6010C	7440-36-0	Antimony	mg/kg	4.04 UJ Q	4.33 UJ Q	4.02 UJ Q	4.06 UJ Q	3.99 UJ Q	4.06 UJ Q	4.08 UJ Q	4.02 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.96	7.44	3.07 J Z	4.79	5.35	3.06 J Z	4.75	2.99 J Z
6010C	7440-39-3	Barium	mg/kg	104	114	94.9	98.9	105	105	79.3	95.6
6010C	7440-41-7	Beryllium	mg/kg	0.601 J Z	0.882 J Z	0.586 J Z	0.591 J Z	0.715 J Z	0.509 J Z	0.588 J Z	0.409 J Z
6010C	7440-42-8	Boron	mg/kg	4.55 J Z	4.23 J Z	6.01 J Z	4.70 J Z	4.18 J Z	2.11 J Z	0.975 J Z	4.22 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.01 U	1.08 U	1.01 U	1.01 U	0.998 U	0.166 J Z	1.02 U	0.495 J Z
6010C	7440-47-3	Chromium	mg/kg	21.7	25	17.4	21.7	23.9	17.2	16.8	16.5
6010C	7440-48-4	Cobalt	mg/kg	6.01	6.01	4.64	5.61	6.3	4.24	4.86	4.35
6010C	7440-50-8	Copper	mg/kg	14.9	14.6	17.6	15.2	15.4	12.1	4.41	9.48
6010C	7440-62-2	Vanadium	mg/kg	36.5	49.3	33.1	38.5	43.1	31.6	36.2	28
6010C	7440-66-6	Zinc	mg/kg	59	49.8	65.0 J Q	53.6	48.2	199	45.8	82.9
6010C	7440-67-7	Zirconium	mg/kg	2.15 J Z	3.00 J Z	3.33 J Z	2.46 J Z	2.95 J Z	3.62 J Z	3.02 J Z	1.35 J Z
6010C	7440-70-2	Calcium	mg/kg	2440	2670	3290	2680	2170	13700	2750	2720
6010C	7723-14-0	Phosphorus	mg/kg	335 J Q	177 J Q	406	387 J Q	279 J Q	367 J Q	296 J Q	363
6020A	7440-22-4	Silver	mg/kg	0.0654 J Z	0.0405 J Z	0.0344 J Z	0.0390 J Z	0.0333 J Z	0.0457 J Z	0.0272 J Z	1.38 J FD
6020A	7440-24-6	Strontium	mg/kg	20.6	27.5	19.3	20.4	21.7	53.8 J Q, A	20.9 J Q, A	22.2 J Q
6020A	7440-28-0	Thallium	mg/kg	0.271	0.259	0.25	0.274	0.282	0.262	0.222	0.221
6020A	7782-49-2	Selenium	mg/kg	0.154 J Z	0.433 U	0.120 J Z	0.162 J Z	0.137 J Z	0.148 J Z	0.136 J Z	0.152 J FD, Z

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			Sample Name	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013
			SDG	PH132	PH132	PH131	PH131	PH131	PH131	PH131	PH135
			Start Depth	0	4	0	4	4	8	0	0
			End Depth	0.5	5	0.5	5	5	9	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16200	18200	13800	13300	15000	14300	14800	18500
6010C	7439-89-6	Iron	mg/kg	20200	21700	21100	20000	20000	18900	19300	21500
6010C	7439-92-1	Lead	mg/kg	7.05 J FD	6.71	6.81	8.02	7.91	5.9	6	7.17
6010C	7439-93-2	Lithium	mg/kg	19.9	18.4	22.5	22.3	22.1	22.9	20.3	23.3
6010C	7439-95-4	Magnesium	mg/kg	3950	4000	4670	4470	4320	3880	4010	4210
6010C	7439-96-5	Manganese	mg/kg	311	241	301	379	318	196	305	326
6010C	7439-98-7	Molybdenum	mg/kg	2.06 UJ F, FD	2.12 U F	2.00 U F	2.00 U F	2.03 U F	2.07 U F	2.04 U F	1.26 J F
6010C	7440-02-0	Nickel	mg/kg	8.91	8.64	11.2	11.8	10.7	8.1	10.9	9.21
6010C	7440-09-7	Potassium	mg/kg	2750	1570	2630 J Q	3240 J Q	2790 J Q	1880 J Q	3360 J Q	1960
6010C	7440-23-5	Sodium	mg/kg	71.2 J Z	136	68.3 J Z	78.9 J Z	91.0 J Z	138	67.0 J Z	126
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.6 U B	10.0 U B	10.0 U B	10.1 U B	10.4 U B	10.2 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1110	1130	1070	1060	1030	1150	1030	1110
6010C	7440-36-0	Antimony	mg/kg	4.12 UJ Q	4.24 UJ Q	4.01 UJ Q	4.00 UJ Q	4.05 UJ Q	4.14 UJ Q	4.09 UJ Q	4.00 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.91	5.08	3.92 J Z	4.08	3.81 J Z	2.85 J Z	3.17 J Z	5.83
6010C	7440-39-3	Barium	mg/kg	99.4	102	80	86.2	84.6	63.4	88.7	86.1
6010C	7440-41-7	Beryllium	mg/kg	0.634 J Z	0.725 J Z	0.608 J Z	0.566 J Z	0.605 J Z	0.557 J Z	0.579 J Z	0.767 J Z
6010C	7440-42-8	Boron	mg/kg	4.43 J Z	3.78 J Z	1.23 J Z	2.05 J Z	2.15 J Z	1.22 J Z	1.52 J Z	3.61 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.308 J Z	0.136 J Z	1.00 U	1.00 U	1.01 U	1.04 U	1.02 U	0.140 J Z
6010C	7440-47-3	Chromium	mg/kg	19.2	21.1	18.1	19.8	18.3	20.7	17.5	21
6010C	7440-48-4	Cobalt	mg/kg	5.65	4.45	5.07	4.79	5	3.26	4.95	5.86
6010C	7440-50-8	Copper	mg/kg	8.45	6.35	5.96	6.34	5.76	3.66	7.16	7.29
6010C	7440-62-2	Vanadium	mg/kg	36.5	40.2	34	33.5	34.2	32.4	32.6	38.1
6010C	7440-66-6	Zinc	mg/kg	51.6	41.3	53.6	55.9	51.4	38.6	51.2	53.9
6010C	7440-67-7	Zirconium	mg/kg	1.98 J Z	1.69 J Z	2.49 J Z	2.58 J Z	2.74 J Z	2.90 J Z	2.27 J Z	1.38 J Z
6010C	7440-70-2	Calcium	mg/kg	1910	2010	2690	2640	2600	1930	2070	2010
6010C	7723-14-0	Phosphorus	mg/kg	229	161	337 J Q	409 J Q	366 J Q	165 J Q	371 J Q	179
6020A	7440-22-4	Silver	mg/kg	0.104 J FD, Z	0.0521 J Z	0.0395 J Z	0.0930 J FD, Z	0.158 J FD, Z	0.0445 J Z	0.0505 J Z	0.0444 J Z
6020A	7440-24-6	Strontium	mg/kg	18.6 J Q	21.7 J Q	22.1 J Q, A	22.9 J Q, A	24.2 J Q, A	19.7 J Q, A	20.6 J Q, A	17.8 J Q
6020A	7440-28-0	Thallium	mg/kg	0.28	0.224	0.297	0.286	0.274	0.248	0.268	0.248
6020A	7782-49-2	Selenium	mg/kg	0.412 UJ FD	0.424 U	0.170 J Z	0.161 J Z	0.145 J Z	0.414 U	0.206 J Z	0.400 U

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				Sample Name	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/18/2013	11/26/2013
				SDG	PH135	PH134	PH134	PH134	PH135	PH135	PH131	PH135
				Start Depth	2.5	0	0	6	0	0	0	0
				End Depth	3.5	0.5	0.5	7	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	20100	17000	15800	15600	7900	10400	14900	13900
6010C	7439-89-6	Iron	mg/kg	25900	19800	19600	19700	15800	19300	20500	21200
6010C	7439-92-1	Lead	mg/kg	8.2	7.18	7.49	5.95	4.83	4.59	6.34	5.59
6010C	7439-93-2	Lithium	mg/kg	27.1	23.7	23.4	15.5	14.7	18.7	22	24.5
6010C	7439-95-4	Magnesium	mg/kg	5660	4040	4030	3840	3350	4850	4500	4960
6010C	7439-96-5	Manganese	mg/kg	235	244	292	231	288	276	298	325
6010C	7439-98-7	Molybdenum	mg/kg	0.313 J F	2.01 U F	2.04 U F	2.03 U F	2.05 U F	2.02 U F	2.06 U F	2.00 U F
6010C	7440-02-0	Nickel	mg/kg	7.86	9.37	10.3	9.14	4.72	7.91	10.9	8.48
6010C	7440-09-7	Potassium	mg/kg	1590	2630 J Q	3200 J Q	2070 J Q	2510	2460	3670 J Q	3540
6010C	7440-23-5	Sodium	mg/kg	129	96.4 J Z	96.9 J Z	139	129	71.8 J Z	72.2 J Z	79.3 J Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.2 U B	10.1 U B	10.2 U B	10.1 U B	10.3 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1340	1070	1090	1090	928	1040	1150	1080
6010C	7440-36-0	Antimony	mg/kg	4.17 UJ Q	4.02 UJ Q	4.08 UJ Q	4.06 UJ Q	4.09 UJ Q	4.05 UJ Q	4.13 UJ Q	4.00 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	7.08	3.56 J Z	3.16 J Z	3.91 J Z	4.00 J Z	4.04 J Z	3.36 J Z	4.7
6010C	7440-39-3	Barium	mg/kg	87.9	80.6	88.9	61.2	54.8	63.9	89.9	90.8
6010C	7440-41-7	Beryllium	mg/kg	0.814 J Z	0.661 J Z	0.619 J Z	0.619 J Z	0.369 J Z	0.432 J Z	0.573 J Z	0.535 J Z
6010C	7440-42-8	Boron	mg/kg	2.91 J Z	10.1 UJ FD	2.03 J FD, Z	10.1 U	2.00 J Z	2.24 J Z	10.3 U	2.78 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.174 J Z	1.01 U	1.02 U	1.01 U	0.241 J Z	0.197 J Z	1.03 U	0.304 J Z
6010C	7440-47-3	Chromium	mg/kg	23.4	36.5	33.2	21.9	12.2	18.9	21.1	18.1
6010C	7440-48-4	Cobalt	mg/kg	5.17	4.03	4.21	3.93	4.09	5.07	5.46	5.39
6010C	7440-50-8	Copper	mg/kg	8.97	18.1	18.3	15.9	5.35	7.05	5.71	9.06
6010C	7440-62-2	Vanadium	mg/kg	44.7	32	32.8	30.1	24.5	34	35.2	34.4
6010C	7440-66-6	Zinc	mg/kg	51.6	132 J Q	116 J Q	65.5 J Q	56.7	49.7	51.7	59.6
6010C	7440-67-7	Zirconium	mg/kg	1.24 J Z	2.73 J Z	2.64 J Z	2.73 J Z	5.11 U	5.06 U	2.37 J Z	5.00 U
6010C	7440-70-2	Calcium	mg/kg	2880	2390	2630	2160	2400	2590	2280	2110
6010C	7723-14-0	Phosphorus	mg/kg	295	278	300	121	302	370	407 J Q	551
6020A	7440-22-4	Silver	mg/kg	0.208 U	3.03 J FD	13.6 J FD	2.02	0.163 J Z	0.202 U	0.206 U	0.200 U
6020A	7440-24-6	Strontium	mg/kg	23.1 J Q	17.2	19.8	17.5	11.8 J Q	13.4 J Q	16.1 J Q, A	13.6 J Q
6020A	7440-28-0	Thallium	mg/kg	0.244	0.241	0.229	0.218	0.213	0.217	0.299	0.278
6020A	7782-49-2	Selenium	mg/kg	0.105 J Z	0.208 J Z	0.184 J Z	0.107 J Z	0.409 U	0.123 J Z	0.189 J Z	0.136 J Z

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			Sample Name	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/26/2013
			SDG	PH132	PH131	PH131	PH131	PH131	PH135	PH135	PH135
			Start Depth	0	0	2.5	0	3	0	3	0
			End Depth	0.5	0.5	3.5	0.5	4	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	15000	16900	18900	17300	34200	24400	29800	15100
6010C	7439-89-6	Iron	mg/kg	21600	26100	25500	23400	34900	27500	45700	21200
6010C	7439-92-1	Lead	mg/kg	6.86	9.27	8.37	8.29	16.9	10.1	19.3	6.78
6010C	7439-93-2	Lithium	mg/kg	16.8	22.7	21.9	23.4	49	27.7	42	21.6
6010C	7439-95-4	Magnesium	mg/kg	4360	6220	5970	4690	10700	5320	9320	4400
6010C	7439-96-5	Manganese	mg/kg	198	315	160	316	497	335	350	337
6010C	7439-98-7	Molybdenum	mg/kg	2.07 U F	2.03 U F	2.05 U	2.10 U F	2.15 U F	2.12 U F	2.15 U F	2.04 U F
6010C	7440-02-0	Nickel	mg/kg	6.97	14.1	8.88	14.6	22.1	13	17.5	11
6010C	7440-09-7	Potassium	mg/kg	1780	3220 J Q	1530 J Q	4230 J Q	4690 J Q	2180	3070	3560
6010C	7440-23-5	Sodium	mg/kg	83.2 J Z	83.1 J Z	378	73.1 J Z	165	90.9 J Z	208	78.9 J Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.3 U B	10.5 U B	10.8 U B	10.6 U B	10.7 U B	10.2 U B
6010C	7440-32-6	Titanium	mg/kg	1070	1260	1300	1180	1610	1180	1470	1110
6010C	7440-36-0	Antimony	mg/kg	4.15 UJ Q	4.05 UJ Q	4.11 UJ Q	4.19 UJ Q	4.30 UJ Q	4.23 UJ Q	4.30 UJ Q	4.08 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.21	3.97 J Z	5.19	4.35	7.17	8.17	17.1	4.87
6010C	7440-39-3	Barium	mg/kg	72.3	97.9	67.8	106	179	126	142	107
6010C	7440-41-7	Beryllium	mg/kg	0.595 J Z	0.737 J Z	0.509 J Z	0.721 J Z	1.61	1.08	1.54	0.590 J Z
6010C	7440-42-8	Boron	mg/kg	3.01 J Z	2.43 J Z	10.3 U	1.87 J Z	1.11 J Z	3.97 J Z	3.41 J Z	4.81 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.169 J Z	1.01 U	1.03 U	1.05 U	1.08 U	0.201 J Z	0.198 J Z	0.373 J Z
6010C	7440-47-3	Chromium	mg/kg	20.8	25	25.5	22.9	39.1	28	42.5	21.6
6010C	7440-48-4	Cobalt	mg/kg	5.68	6.69	3.88	5.84	10.9	7.77	11.3	5.88
6010C	7440-50-8	Copper	mg/kg	7.87	9.42	5.21	9.41	18.6	12	33.3	11.7
6010C	7440-62-2	Vanadium	mg/kg	42.5	52.3	47.5	41.6	75.1	50.4	71	37.6
6010C	7440-66-6	Zinc	mg/kg	40.3	54.5	48.2	56.3	98.3	57.6	103	58.6
6010C	7440-67-7	Zirconium	mg/kg	1.32 J Z	4.02 J Z	3.35 J Z	3.29 J Z	5.83	1.50 J Z	1.70 J Z	1.74 J Z
6010C	7440-70-2	Calcium	mg/kg	2070	4110	3040	2220	5080	2670	4330	2250
6010C	7723-14-0	Phosphorus	mg/kg	218	403 J Q	293 J Q	434 J Q	868 J Q	252	330	410
6020A	7440-22-4	Silver	mg/kg	0.207 U	0.0312 J Z	0.205 U	0.0423 J Z	0.215 U	0.0840 J Z	0.215 U	0.110 J Z
6020A	7440-24-6	Strontium	mg/kg	17.6 J Q	21.4 J Q, A	21.4 J Q, A	19.9 J Q, A	33.7 J Q, A	24.4 J Q	35.2 J Q	19.1 J Q
6020A	7440-28-0	Thallium	mg/kg	0.24	0.245	0.251	0.271	0.392	0.314	0.416	0.263
6020A	7782-49-2	Selenium	mg/kg	0.182 J Z	0.191 J Z	0.532	0.204 J Z	0.390 J Z	0.294 J Z	0.257 J Z	0.129 J Z

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				Sample Name	SL-767-SA5A-SB-2.5-3.5	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0
				Sample Type	N	N	N	FD	N	N	N	FD
				Sample Date	11/26/2013	06/04/2013	06/10/2013	06/10/2013	06/10/2013	06/13/2013	06/10/2013	06/10/2013
				SDG	PH135	PH047	PH052	PH052	PH052	PH056	PH052	PH052
				Start Depth	2.5	0	0	0	0	0	0	6
				End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	15300	37300	18900	17600	23300	15300	16000	18600
6010C	7439-89-6	Iron	mg/kg	21200	34300	20900	20200	22100	19900	19000	24000
6010C	7439-92-1	Lead	mg/kg	7.03	12.7	12.7	6.83	6.5	7.66	5.6	7.02
6010C	7439-93-2	Lithium	mg/kg	21.7	34.3	19.1	19.2	22.6	19.8	16.7	23.5
6010C	7439-95-4	Magnesium	mg/kg	4430	5910	3720	3640	3820	3860	3460	4690
6010C	7439-96-5	Manganese	mg/kg	336	520	291	346	275	327	314	171
6010C	7439-98-7	Molybdenum	mg/kg	2.05 U F	2.12 U F, B	1.99 U F, B	2.05 UJ F, FD, B	2.00 UJ F, FD, B	1.99 U F	2.01 U F, B	2.10 U F
6010C	7440-02-0	Nickel	mg/kg	10.6	19.1	12.6	13	14.2	11.3	11.8	9.26
6010C	7440-09-7	Potassium	mg/kg	3590	2380	2180 J Q	3340 J Q	2170 J Q	3350 J Q	2710 J Q	1830 J Q
6010C	7440-23-5	Sodium	mg/kg	77.4 J Z	758	180	85.0 J Z	99.1 J Z	68.9 J Z	106	854
6010C	7440-31-5	Tin	mg/kg	10.2 U B	10.6 U B	9.97 U B	10.3 U B	10.0 U B	9.95 U B	10.1 U B	10.5 U B
6010C	7440-32-6	Titanium	mg/kg	1130	1580	1340	1310	1310	1040	1290	1150
6010C	7440-36-0	Antimony	mg/kg	4.09 UJ Q	4.25 U	3.99 UJ Q	4.11 UJ Q	4.00 UJ Q	3.98 UJ Q	4.03 UJ Q	0.846 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	4.76	7.88	3.84 J Z	3.81 J Z	4.42	4.75	4.1	6.23
6010C	7440-39-3	Barium	mg/kg	105	136	94.4	105	108	100	96	53.1
6010C	7440-41-7	Beryllium	mg/kg	0.586 J Z	1.42	0.675 J Z	0.641 J Z	0.812 J Z	0.599 J Z	0.580 J Z	0.671 J Z
6010C	7440-42-8	Boron	mg/kg	4.26 J Z	10.6 U	4.57 J Z	4.55 J Z	4.91 J Z	3.09 J Z	4.26 J Z	2.23 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.328 J Z	1.06 U	0.529 J Z	0.561 J Z	0.511 J Z	0.995 U	0.508 J Z	1.05 U
6010C	7440-47-3	Chromium	mg/kg	20.4	34.8	21.4	19.6	22.1	18.2	19.4	21.2
6010C	7440-48-4	Cobalt	mg/kg	5.83	13.4	6.44	6.18	6.52	5.32	6.01	5.01
6010C	7440-50-8	Copper	mg/kg	11.8	13.4	19.9 UJ Q, E	10.3 UJ Q, E	20.0 UJ Q, E	9.62	10.1 UJ Q, E	9.37
6010C	7440-62-2	Vanadium	mg/kg	37.5	67.7	39.5	36.4	41.3	32.7	35.9	37.4
6010C	7440-66-6	Zinc	mg/kg	61.1	54.1	40.5	45.4	42.4	51.8	41.9	44.8
6010C	7440-67-7	Zirconium	mg/kg	1.66 J Z	2.18 J Z	2.35 J Z	1.28 J FD, Z	2.25 J FD, Z	2.19 J Z	1.48 J Z	3.14 J Z
6010C	7440-70-2	Calcium	mg/kg	2340	1770	1700	1710	1800	1980 J Q	1580	1630 J Q
6010C	7723-14-0	Phosphorus	mg/kg	418	224	187	259	217	323	185	94.3
6020A	7440-22-4	Silver	mg/kg	0.0456 J Z	0.0763 J Z	0.0674 J Q, E, Z	0.0459 J Q, E, Z	0.0444 J Q, E, Z	0.0251 J Z	0.0256 J Q, E, Z	0.210 UJ FD
6020A	7440-24-6	Strontium	mg/kg	19.5 J Q	24.4	20.5 J Q, E	24.3 J Q, E	22.6 J Q, E	18.6	24.3 J Q, E	17
6020A	7440-28-0	Thallium	mg/kg	0.241	0.346	0.321 J Q, E	0.277 J Q, E	0.261 J Q, E	0.257	0.302 J Q, E	0.288
6020A	7782-49-2	Selenium	mg/kg	0.109 J Z	0.537	0.186 J Q, E, Z	0.197 J Q, E, Z	0.156 J Q, E, Z	0.157 J Z	0.195 J Q, E, Z	0.420 U

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				Sample Name	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	06/10/2013	06/10/2013	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013
				SDG	PH052	PH053	PH053	PH058	PH058	PH058	PH055	PH055
				Start Depth	6	0	0	0	3	3	0	2
				End Depth	7	0.5	0.5	0.5	4	4	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	18400	14900	17500	15700	27900	22700	16900	12800
6010C	7439-89-6	Iron	mg/kg	23400	18700	22600	20200	44500	35600	20100	18900
6010C	7439-92-1	Lead	mg/kg	6.39	10.8	6.92	12.4	16.6	11.8	5.34	3.04 J Z
6010C	7439-93-2	Lithium	mg/kg	22.9	17.4	21.1	20.1	52.7	45.9	24.4	28.8
6010C	7439-95-4	Magnesium	mg/kg	4560	3660	4420	4180	10500	8040	4450	4310
6010C	7439-96-5	Manganese	mg/kg	130	337	341	344 J E	618 J E	372 J E	441	343
6010C	7439-98-7	Molybdenum	mg/kg	2.08 U F	2.02 U F	2.02 U F	2.03 U F, B	2.12 UJ F, FD, B	2.08 UJ F, FD, B	2.08 U F, B	2.04 U F, B
6010C	7440-02-0	Nickel	mg/kg	8.79	11.7	18.7	15	32.2	23.3	15.8	9.55
6010C	7440-09-7	Potassium	mg/kg	1520 J Q	3310 J Q	3590 J Q	4190 J Q	3110 J Q	2950 J Q	3880	2220
6010C	7440-23-5	Sodium	mg/kg	895	83.5 J Z	84.1 J Z	84.2 J Z	270	181	82.9 J Z	108
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.1 U B	10.1 U B	10.6 U B	10.4 U B	10.4 U B	10.2 U B
6010C	7440-32-6	Titanium	mg/kg	1090	1140	1200	1270	1730	1530	1390	1350
6010C	7440-36-0	Antimony	mg/kg	0.735 J Q, Z	0.703 J Q, Z	0.773 J Q, Z	4.05 UJ Q	4.24 UJ Q	4.15 UJ Q	4.16 UJ Q	4.07 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	6.93	4.59	5.04	4.17	12.8	10.8	4.71	5.52
6010C	7440-39-3	Barium	mg/kg	58.2	101	107	106	171	126	137	69.8
6010C	7440-41-7	Beryllium	mg/kg	0.716 J Z	0.567 J Z	0.662 J Z	0.599 J Z	1.47	1.08	0.774 J Z	0.581 J Z
6010C	7440-42-8	Boron	mg/kg	2.53 J Z	3.67 J Z	3.45 J Z	10.1 U B	10.6 U B	10.4 U B	8.48 J Z	2.26 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.04 U	1.01 U	1.01 U	0.301 J Z	0.103 J FD, Z	1.04 UJ FD	1.04 U	1.02 U
6010C	7440-47-3	Chromium	mg/kg	21.1	18.8	33.9	25.1	49.7	36.2	24.9	16.2
6010C	7440-48-4	Cobalt	mg/kg	3.3	5.57	5.99	5.48 J E	12.8 J E	8.66 J E	5.59	4.89
6010C	7440-50-8	Copper	mg/kg	8.65	10.7	11.8	9.97 J A	27.4 J A	17.9 J A	13.9 J A	5.74 J A
6010C	7440-62-2	Vanadium	mg/kg	37.8	32.6	38	37.5	78.1	59.6	43.6	33.5
6010C	7440-66-6	Zinc	mg/kg	41.8	51.3	57.9	64.2	102	86.7	64.9	57.2
6010C	7440-67-7	Zirconium	mg/kg	3.14 J Z	2.90 J Z	3.55 J Z	4.04 J Z	5.38	5.06 J Z	3.62 J Z	2.71 J Z
6010C	7440-70-2	Calcium	mg/kg	1620 J Q	2000 J Q	2240 J Q	2120	6080	4440	2550	2430
6010C	7723-14-0	Phosphorus	mg/kg	115	320	377	427	611	581	412	375
6020A	7440-22-4	Silver	mg/kg	0.0319 J FD, Z	0.0485 J Z	0.0339 J Z	0.0692 J Z	0.212 U	0.208 U	0.0429 J Z	0.204 U
6020A	7440-24-6	Strontium	mg/kg	18.8	20.5	22.5	31.7 J Q	47.4 J Q	32.8 J Q	27.6 J E, Q, A	21.0 J E, Q, A
6020A	7440-28-0	Thallium	mg/kg	0.263	0.265	0.245	0.405	0.393	0.36	0.305 J Q	0.322 J Q
6020A	7782-49-2	Selenium	mg/kg	0.417 U	0.156 J Z	0.120 J Z	0.202 J Z	0.265 J Z	0.338 J Z	0.202 J Z	0.121 J Z

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				Sample Name	SL-782-SA5A-SB-0.0-0.5	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013
				SDG	PH055	PH055	PH054	PH054	PH055	PH055	PH054	PH054
				Start Depth	0	4.5	0	0	0	2.5	0	0
				End Depth	0.5	5.5	0.5	0.5	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	19900	15700	16300	15400	16400	13500	15500	14000	
6010C	7439-89-6	Iron	mg/kg	19600	19800	27800	21200	19300	16100	18400	19700	
6010C	7439-92-1	Lead	mg/kg	5.65	4.63	8.3	11	5.8	4.34	8.06	10.3	
6010C	7439-93-2	Lithium	mg/kg	25.5	18.5	26.9	22.5	20.7	16.8	19.6	21.1	
6010C	7439-95-4	Magnesium	mg/kg	4220	3700	5120	4000	3720	3200	3550	4020	
6010C	7439-96-5	Manganese	mg/kg	318	148	357	312	279	182	313	299	
6010C	7439-98-7	Molybdenum	mg/kg	2.07 U F, B	2.12 U F, B	2.07 UJ F, FD, B	2.02 UJ F, FD, B	2.04 U F, B	2.02 U F, B	2.03 U F, B	1.98 U F, B	
6010C	7440-02-0	Nickel	mg/kg	14	7.2	12.2	13.9	11.1	7.51	11.6	12	
6010C	7440-09-7	Potassium	mg/kg	1810	1660	3470	3360	2260	1810	3070	3320	
6010C	7440-23-5	Sodium	mg/kg	158	241	112	109	129	157	99.9 J Z	88.0 J Z	
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.6 U B	10.3 U B	10.1 U B	10.2 U B	10.1 U B	10.1 U B	9.90 U B	
6010C	7440-32-6	Titanium	mg/kg	1250	1100	1150	1070	1120	1080	964	936	
6010C	7440-36-0	Antimony	mg/kg	4.14 UJ Q	4.25 UJ Q	4.13 UJ Q	4.05 UJ Q	4.09 UJ Q	4.05 UJ Q	4.05 UJ Q	3.96 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	5.06	5.2	5.67	3.75 J Z	5.65	4.76	3.41 J Z	2.82 J Z	
6010C	7440-39-3	Barium	mg/kg	101	53.2	94.4	97.7	98.2	66.3	103	103	
6010C	7440-41-7	Beryllium	mg/kg	0.834 J Z	0.621 J Z	0.792 J Z	0.581 J Z	0.768 J Z	0.563 J Z	0.578 J Z	0.507 J Z	
6010C	7440-42-8	Boron	mg/kg	3.66 J Z	2.57 J Z	4.22 J Z	4.93 J Z	3.25 J Z	2.86 J Z	5.43 J Z	4.66 J Z	
6010C	7440-43-9	Cadmium	mg/kg	1.04 U	1.06 U	0.639 J Z	0.712 J Z	1.02 U	1.01 U	0.607 J Z	0.660 J Z	
6010C	7440-47-3	Chromium	mg/kg	26	17	19.3 J Q, E	22.9 J Q, E	19.3	16	17.3 J Q, E	18.7 J Q, E	
6010C	7440-48-4	Cobalt	mg/kg	5.5	2.75	10.6 J FD	5.77 J FD	6.24	3.57	5.31	5.23	
6010C	7440-50-8	Copper	mg/kg	7.40 J A	5.17 J A	12.4 J FD, Q	0.571 J FD, Q, Z	8.23 J A	5.80 J A	9.95 J Q	9.61 J Q	
6010C	7440-62-2	Vanadium	mg/kg	41.7	36.3	38	34.5	40	32.4	31.7	31.9	
6010C	7440-66-6	Zinc	mg/kg	50.1	40.6	66.9	64.4	44.6	35.4	47.7	59.3	
6010C	7440-67-7	Zirconium	mg/kg	4.28 J Z	2.97 J Z	1.41 J Z	2.13 J Z	3.61 J Z	3.42 J Z	2.04 J Z	1.23 J Z	
6010C	7440-70-2	Calcium	mg/kg	2260	1610	2480	2740	2180	1900	2060	1900	
6010C	7723-14-0	Phosphorus	mg/kg	225	136	429 J Q	394 J Q	224	146	358 J Q	464 J Q	
6020A	7440-22-4	Silver	mg/kg	0.0472 J Z	0.0482 J Z	0.207 UJ FD	0.0599 J FD, Q, Z	0.0273 J Z	0.0233 J Z	0.0534 J Q, Z	0.0451 J Q, Z	
6020A	7440-24-6	Strontium	mg/kg	22.8 J E, Q, A	17.8 J E, Q, A	22.4 J Q	19.0 J Q	25.8 J E, Q, A	19.8 J E, Q, A	31.1 J Q	19.8 J Q	
6020A	7440-28-0	Thallium	mg/kg	0.259 J Q	0.199 J Q, Z	0.283 J Q	0.252 J Q	0.298 J Q	0.229 J Q	0.335 J Q	0.256 J Q	
6020A	7782-49-2	Selenium	mg/kg	0.414 U	0.425 U	0.177 J FD, Q, Z	0.405 UJ FD	0.173 J Z	0.119 J Z	0.181 J Q, Z	0.131 J Q, Z	

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			Sample Name	SL-787-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013
			SDG	PH054	PH054	PH054	PH054	PH056	PH056	PH056	PH056
			Start Depth	0	0	0	5	0	0	0	0
			End Depth	0.5	0.5	0.5	6	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	18000	14400	16600	18900	16000	15300	14600	14200
6010C	7439-89-6	Iron	mg/kg	20900	18700	21200	23300	19600	19700	22900	19000
6010C	7439-92-1	Lead	mg/kg	6.6	12.5	7.96	6.24	8.09	9.25	5.16	9.43
6010C	7439-93-2	Lithium	mg/kg	21.4	20.9	23.6	23.6	20.5	19.2	23	20.6
6010C	7439-95-4	Magnesium	mg/kg	3980	3530	4270	4450	3750	3620	4940	3740
6010C	7439-96-5	Manganese	mg/kg	311	310	317	178	313	318	270	276
6010C	7439-98-7	Molybdenum	mg/kg	2.06 U F, B	1.94 U F, B	2.00 U F, B	2.09 U F, B	2.02 U F	1.96 U F	2.00 U F	2.00 U F
6010C	7440-02-0	Nickel	mg/kg	12.9	10.8	11.8	9.35	11	11.3	9.93	10.3
6010C	7440-09-7	Potassium	mg/kg	2900	3720	3480	1570	3070 J Q	3350 J Q	2150 J Q	3380 J Q
6010C	7440-23-5	Sodium	mg/kg	101 J Z	84.6 J Z	104	503	84.2 J Z	78.3 J Z	97.4 J Z	68.8 J Z
6010C	7440-31-5	Tin	mg/kg	10.3 U B	9.69 U B	10.0 U B	10.4 U B	10.1 U B	9.81 U B	9.99 U B	10.0 U B
6010C	7440-32-6	Titanium	mg/kg	1080	909	1140	1170	1060	1030	1190	991
6010C	7440-36-0	Antimony	mg/kg	4.12 UJ Q	3.88 UJ Q	4.01 UJ Q	4.17 UJ Q	4.05 UJ Q	0.757 J Q, Z	0.639 J Q, Z	0.529 J Q, Z
6010C	7440-38-2	Arsenic	mg/kg	3.97 J Z	3.52 J Z	3.87 J Z	3.70 J Z	4.61	4.55	5.28	5.04
6010C	7440-39-3	Barium	mg/kg	108	98.6	110	70.3	104	108	76.4	92.2
6010C	7440-41-7	Beryllium	mg/kg	0.681 J Z	0.560 J Z	0.606 J Z	0.671 J Z	0.602 J Z	0.588 J Z	0.654 J Z	0.548 J Z
6010C	7440-42-8	Boron	mg/kg	5.37 J Z	6.80 J Z	5.38 J Z	5.01 J Z	3.39 J Z	3.18 J Z	1.68 J Z	2.99 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.582 J Z	0.582 J Z	0.625 J Z	0.540 J Z	1.01 U	0.981 U	0.999 U	1.00 U
6010C	7440-47-3	Chromium	mg/kg	19.3 J Q, E	16.6 J Q, E	19.4 J Q, E	22.1 J Q, E	17.5	18	18.9	17.8
6010C	7440-48-4	Cobalt	mg/kg	5.94	4.84	5.46	4.12	4.97	4.85	6.6	4.55
6010C	7440-50-8	Copper	mg/kg	8.70 J Q	9.01 J Q	9.36 J Q	6.45 J Q	8.91	9.94	7.72	8.98
6010C	7440-62-2	Vanadium	mg/kg	36.3	29.8	35.1	37.1	31.2	31.6	32.3	29.6
6010C	7440-66-6	Zinc	mg/kg	47.7	55.8	56.1	41.5	51.2	54.5	52	52
6010C	7440-67-7	Zirconium	mg/kg	2.09 J Z	1.75 J Z	2.07 J Z	1.62 J Z	2.92 J Z	3.15 J Z	2.69 J Z	2.84 J Z
6010C	7440-70-2	Calcium	mg/kg	1940	3000	2460	2370	2200 J Q	2090 J Q	2280 J Q	2340 J Q
6010C	7723-14-0	Phosphorus	mg/kg	310 J Q	571 J Q	461 J Q	126 J Q	399	398	246	449
6020A	7440-22-4	Silver	mg/kg	0.0504 J Q, Z	0.0873 J Q, Z	0.200 UJ F, Q	0.209 UJ F, Q	0.0556 J Z	0.0583 J Z	0.200 U	0.103 J Z
6020A	7440-24-6	Strontium	mg/kg	32.8 J Q	34.5 J Q	37.0 J Q	25.4 J Q	20.6	20.6	17.8	17.7
6020A	7440-28-0	Thallium	mg/kg	0.406 J Q	0.331 J Q	0.436 J Q	0.241 J Q	0.225	0.235	0.276	0.226
6020A	7782-49-2	Selenium	mg/kg	0.169 J Q, Z	0.192 J Q, Z	0.168 J Q, Z	0.417 U	0.134 J Z	0.122 J Z	0.400 U	0.127 J Z

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				Sample Name	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	06/13/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	05/31/2013	05/30/2013
				SDG	PH056	PH047	PH047	PH047	PH047	PH047	PH044	PH043
				Start Depth	0	0	5.5	0	0	4	0	0
				End Depth	0.5	0.5	6.5	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	15400	15700	18300	14800	10800	19500	14300	17200
6010C	7439-89-6	Iron	mg/kg	21200	23200	25200	20700	14700	25200	21000	22000
6010C	7439-92-1	Lead	mg/kg	9.08	9.59	7.31	11.7	7.59	7.62	10.7	6.38
6010C	7439-93-2	Lithium	mg/kg	22	22.7	25.8	21.6	14.6	30.4	22.9	21.6
6010C	7439-95-4	Magnesium	mg/kg	4170	4450	5020	3960	2870	4700	4510	4360
6010C	7439-96-5	Manganese	mg/kg	300	329	418	341	275	357	335	417 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F	1.97 U F, B	2.04 U F, B	2.01 U F, B	2.02 U	2.09 U	2.04 U B, F	2.01 U F
6010C	7440-02-0	Nickel	mg/kg	16.1	10.8	12.3	9.68	7.82	10.8	13.2 J A	14.7
6010C	7440-09-7	Potassium	mg/kg	3600 J Q	4520	2250	4010	2890	1460	4200	4090 J Q
6010C	7440-23-5	Sodium	mg/kg	75.5 J Z	80.3 J Z	98.6 J Z	69.3 J Z	65.7 J Z	134	74.4 J Z	94.6 J Z
6010C	7440-31-5	Tin	mg/kg	10.2 U B	9.83 U B	10.2 U B	10.0 U B	10.1 U B	10.5 U B	10.2 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1030	1280	1330	1250	965	1310	1100	1290
6010C	7440-36-0	Antimony	mg/kg	0.601 J Q, Z	3.93 U	4.08 U	4.02 U	4.05 U	4.19 U	4.08 UJ B, Q	4.02 UJ B, Q
6010C	7440-38-2	Arsenic	mg/kg	5.52	4.37	5.63	3.62 J Z	2.96 J Z	5.82	4.82	4.5
6010C	7440-39-3	Barium	mg/kg	95.6	103	93.9	107	80.9	94.4	108	134
6010C	7440-41-7	Beryllium	mg/kg	0.600 J Z	0.630 J Z	0.724 J Z	0.557 J Z	0.403 J Z	0.758 J Z	0.558 J Z	0.685 J Z
6010C	7440-42-8	Boron	mg/kg	2.78 J Z	3.25 J Z	2.11 J Z	3.44 J Z	3.42 J Z	2.41 J Z	4.02 J Z	2.86 J Z
6010C	7440-43-9	Cadmium	mg/kg	1.02 U	0.418 J Z	0.309 J Z	0.507 J Z	0.462 J Z	0.334 J Z	0.394 J Z	0.419 J Z
6010C	7440-47-3	Chromium	mg/kg	29.9	20.8	23	18.1	14.5	22.5	19.9	22.9
6010C	7440-48-4	Cobalt	mg/kg	5.27	5.6	7.05	5.11	4.01	7.79	5.46	6.63 J E
6010C	7440-50-8	Copper	mg/kg	11.3	12.7	12.2	11.6	9.36 J Z	9.98 J Z	13.1	13.7
6010C	7440-62-2	Vanadium	mg/kg	34.4	36.7	42.3	32.7	25.2	44	33.9	38.7
6010C	7440-66-6	Zinc	mg/kg	57.4	61.2	53.2	58.5	44.7	47.7	72.4	64.2
6010C	7440-67-7	Zirconium	mg/kg	3.01 J Z	1.15 J Z	1.27 J Z	5.02 U	1.02 J Z	1.36 J Z	2.85 J Z	4.18 J Z
6010C	7440-70-2	Calcium	mg/kg	2500 J Q	2520	2730	2360	1680	2760	3130 J Q	2440
6010C	7723-14-0	Phosphorus	mg/kg	510	522	386	492	348	184	683 J Q	389
6020A	7440-22-4	Silver	mg/kg	0.316	0.0439 J Z	0.0326 J Z	0.0493 J Z	0.105 J Z	0.0530 J Z	0.0528 J E, Z	0.0589 J Z
6020A	7440-24-6	Strontium	mg/kg	17.7	20	21.4	18.4	14.5	22	25.1 J Q	34.2
6020A	7440-28-0	Thallium	mg/kg	0.231	0.263	0.249	0.236	0.199 J Z	0.211	0.268	0.393
6020A	7782-49-2	Selenium	mg/kg	0.151 J Z	0.135 J Z	0.154 J Z	0.130 J Z	0.102 J Z	0.419 U	0.168 J E, Z	0.176 J Z

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			Sample Name	SL-819-SA5A-SB-6.5-7.5	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/30/2013	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH043	PH058	PH058	PH058	PH058	PH055	PH055	PH055
			Start Depth	6.5	0	0	0	0	0	4	9
			End Depth	7.5	0.5	0.5	0.5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	34600	15900	15600	16200	15800	15600	17400	11100
6010C	7439-89-6	Iron	mg/kg	39700	20600	20100	20500	19700	19100	21700	14800
6010C	7439-92-1	Lead	mg/kg	12.4	8.03	11.2	8.76	8.52	4.64	5.21	4.19
6010C	7439-93-2	Lithium	mg/kg	46.7	21	19.5	20.6	21	21.7	28.1	19.4
6010C	7439-95-4	Magnesium	mg/kg	5270	4350	4250	4220	4240	4330	4680	3210
6010C	7439-96-5	Manganese	mg/kg	167 J E	378 J E	401 J E	355 J E	354 J E	313	844	185
6010C	7439-98-7	Molybdenum	mg/kg	2.19 U F	2.00 U F, B	1.96 U F, B	1.98 U F, B	1.94 U F, B	2.03 U F, B	2.16 U F, B	2.07 U F, B
6010C	7440-02-0	Nickel	mg/kg	18.6	13.4	13.1	13.7	12.8	13	16.5	8.31
6010C	7440-09-7	Potassium	mg/kg	1040 J Q	4180 J Q	4340 J Q	4030 J Q	4210 J Q	3920	1900	1790
6010C	7440-23-5	Sodium	mg/kg	219	78.6 J Z	79.6 J Z	81.2 J Z	77.3 J Z	75.2 J Z	101 J Z	91.4 J Z
6010C	7440-31-5	Tin	mg/kg	11.0 U B	9.98 U B	9.82 U B	9.88 U B	9.70 U B	10.1 U B	10.8 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1110	1160	1230	1180	1230	1280	1310	1110
6010C	7440-36-0	Antimony	mg/kg	4.38 UJ B, Q	3.99 UJ Q	3.93 UJ Q	3.95 UJ Q	3.88 UJ Q	4.06 UJ Q	4.32 UJ Q	4.13 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.64	3.98 J Z	3.94	4.18	3.69 J Z	3.92 J Z	4.92	3.55 J Z
6010C	7440-39-3	Barium	mg/kg	115	122	124	116	113	114	127	73.5
6010C	7440-41-7	Beryllium	mg/kg	1.19	0.604 J Z	0.581 J Z	0.628 J Z	0.579 J Z	0.655 J Z	0.778 J Z	0.464 J Z
6010C	7440-42-8	Boron	mg/kg	11.0 U	9.98 U B	9.82 U B	9.88 U B	9.70 U B	4.18 J Z	3.68 J Z	2.74 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.0427 J Z	0.289 J Z	0.344 J Z	0.252 J Z	0.344 J Z	1.01 U	1.08 U	1.03 U
6010C	7440-47-3	Chromium	mg/kg	38.6	20.9	20.6	21.7	21.2	21.7	23.4	16.4
6010C	7440-48-4	Cobalt	mg/kg	4.74 J E	5.66 J E	5.69 J E	5.49 J E	5.30 J E	5.87	10.9	2.69
6010C	7440-50-8	Copper	mg/kg	22.8	10.6 J A	14.8 J A	10.1 J A	9.90 J A	10.9 J A	7.93 J A	6.65 J A
6010C	7440-62-2	Vanadium	mg/kg	72.6	36.7	35.9	37.7	35.7	38	45	29.6
6010C	7440-66-6	Zinc	mg/kg	49.4	68.6	68.8	64.2	65.5	63.1	54.7	39.4
6010C	7440-67-7	Zirconium	mg/kg	5.99	3.21 J Z	3.28 J Z	3.47 J Z	3.44 J Z	3.71 J Z	3.19 J Z	3.00 J Z
6010C	7440-70-2	Calcium	mg/kg	3430	2680	2850	2350	2490	2090	2610	2140
6010C	7723-14-0	Phosphorus	mg/kg	182	455	507	432	481	410	242	225
6020A	7440-22-4	Silver	mg/kg	0.174 J Z	0.0707 J Z	0.0601 J Z	0.0558 J Z	0.0529 J Z	0.0334 J Z	0.0597 J Z	0.0341 J Z
6020A	7440-24-6	Strontium	mg/kg	44.7	41.4 J Q	40.3 J Q	33.7 J Q	37.9 J Q	28.7 J E, Q, A	27.0 J E, Q, A	20.4 J E, Q, A
6020A	7440-28-0	Thallium	mg/kg	0.293	0.453	0.431	0.365	0.405	0.357 J Q	0.349 J Q	0.268 J Q
6020A	7782-49-2	Selenium	mg/kg	0.225 J Z	0.201 J Z	0.226 J Z	0.196 J Z	0.160 J Z	0.150 J Z	0.432 U	0.413 U

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				Sample Name	SL-826-SA5A-SB-14.0-15.0	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5	SL-832-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	06/12/2013	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013	05/29/2013
				SDG	PH055	PH051	PH041	PH041	PH041	PH042	PH042	PH042
				Start Depth	14	0	0	0	2.75	0	4.5	0
				End Depth	15	0.5	0.5	0.5	3.75	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg		11500	14800	14000	17000	16200	15500	14200	14200
6010C	7439-89-6	Iron	mg/kg		21800	18200	19100	20400	25100	20000	20800	19800
6010C	7439-92-1	Lead	mg/kg		3.44	8.89	10.6	8.14	10	7.58	6.07	7.48
6010C	7439-93-2	Lithium	mg/kg		21.5	19.6	18.2	21.4	27.1	19.7	21.9	18.4
6010C	7439-95-4	Magnesium	mg/kg		4620	3740	3650	4020	5090	3860	4170	3740
6010C	7439-96-5	Manganese	mg/kg		189	364	334	331	299	343	206	344
6010C	7439-98-7	Molybdenum	mg/kg		2.13 U F, B	2.00 U F, B	1.95 U B, F	1.99 U B, F	2.06 U B, F	2.00 U B, F	2.07 U B, F	1.99 U B, F
6010C	7440-02-0	Nickel	mg/kg		10.2	12	12.6 J A	13.9 J A	12.3 J A	13.3 J A	9.43 J A	12.9 J A
6010C	7440-09-7	Potassium	mg/kg		2120	3650	3460	3550	2410	3770	1970	3710
6010C	7440-23-5	Sodium	mg/kg		211	74.7 J Z	61.6 J Z	81.0 J Z	87.4 J Z	65.6 J Z	87.0 J Z	66.7 J Z
6010C	7440-31-5	Tin	mg/kg		10.7 U B	10.0 U B	9.76 U B	9.97 U B	10.3 U B	9.98 U B	10.3 U B	9.95 U B
6010C	7440-32-6	Titanium	mg/kg		1280	1130	929	1140	1300	1090	1150	974
6010C	7440-36-0	Antimony	mg/kg		4.27 UJ Q	0.602 J Z	3.90 UJ B, Q	3.99 UJ B, Q	4.11 UJ B, Q	3.99 UJ B, Q	4.14 UJ B, Q	3.98 UJ B, Q
6010C	7440-38-2	Arsenic	mg/kg		10.1	3.85 J Z	4.61	4.67	6.31	4.79	6.02	4.28
6010C	7440-39-3	Barium	mg/kg		65.1	112	101	102	75	105	58.3	105
6010C	7440-41-7	Beryllium	mg/kg		0.654 J Z	0.590 J Z	0.587 J Z	0.685 J Z	0.758 J Z	0.639 J Z	0.686 J Z	0.614 J Z
6010C	7440-42-8	Boron	mg/kg		2.73 J Z	7.68 J Z	3.10 J Z	3.01 J Z	1.65 J Z	3.52 J Z	1.51 J Z	2.72 J Z
6010C	7440-43-9	Cadmium	mg/kg		1.07 U	0.544 J Z	0.314 J Z	0.238 J Z	0.216 J Z	0.331 J Z	0.154 J Z	0.306 J Z
6010C	7440-47-3	Chromium	mg/kg		19.7	18.3	18.9	22.1	26.7	20.2	19.1	19.6
6010C	7440-48-4	Cobalt	mg/kg		4.14	5.11	5.58	6.63	8.19	6.06	6.37	6.02
6010C	7440-50-8	Copper	mg/kg		7.33 J A	9.53	10.8	10.6	12.1	11.1	8.7	10.8
6010C	7440-62-2	Vanadium	mg/kg		39.8	32.5	33.1	36.8	46.5	35.6	39	33.7
6010C	7440-66-6	Zinc	mg/kg		56.3	57.1	53.3	53	55	55.2	40.7	52.6
6010C	7440-67-7	Zirconium	mg/kg		2.95 J Z	3.49 J Z	3.22 J Z	4.03 J Z	4.10 J Z	3.62 J Z	3.67 J Z	3.29 J Z
6010C	7440-70-2	Calcium	mg/kg		3300	2380	2020 J Q	2010 J Q	2330 J Q	2130 J Q	1820 J Q	1850 J Q
6010C	7723-14-0	Phosphorus	mg/kg		411	404	389 J Q	305 J Q	214 J Q	370 J Q	144 J Q	365 J Q
6020A	7440-22-4	Silver	mg/kg		0.213 U	0.0590 J Z	0.0566 J Z	0.0477 J Z	0.0494 J Z	0.0523 J Z	0.0626 J Z	0.0415 J Z
6020A	7440-24-6	Strontium	mg/kg		25.8 J E, Q, A	23.4	20.6 J Q	21.8 J Q	21.2 J Q	21.7 J Q	17.3 J Q	20.0 J Q
6020A	7440-28-0	Thallium	mg/kg		0.429 J Q	0.274	0.239	0.293	0.284	0.261	0.265	0.251
6020A	7782-49-2	Selenium	mg/kg		0.199 J Z	0.401 U	0.119 J Z	0.399 U	0.121 J Z	0.399 U	0.414 U	0.144 J Z

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				Sample Name	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
				SDG	PH042	PH042	PH043	PH043	PH043	PH043	PH043	PH043
				Start Depth	4	7.2	0	2.5	0	2.4	0	2.5
				End Depth	5	8.2	0.5	3.5	0.5	3.4	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	17700	15100	12700	16900	13600	19700	14200	18100
6010C	7439-89-6	Iron	mg/kg	21100	20200	16300	21300	17800	23800	17900	23200
6010C	7439-92-1	Lead	mg/kg	6.58	5.47	7.05	6.1	7.26	6.8	6.13	6.94
6010C	7439-93-2	Lithium	mg/kg	22.9	23	17	21.3	18.2	26	19	23.9
6010C	7439-95-4	Magnesium	mg/kg	4170	4170	3140	4130	3420	4360	3570	4340
6010C	7439-96-5	Manganese	mg/kg	287	170	292 J E	305 J E	316 J E	326 J E	319 J E	318 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U B, F	2.02 U B, F	1.98 U F	2.74	2.03 U F	2.07 U F	2.23 U F	2.06 U F
6010C	7440-02-0	Nickel	mg/kg	12.5 J A	9.21 J A	10.2	10.8	11.2	12.5	11.6	12.7
6010C	7440-09-7	Potassium	mg/kg	2630	1890	3150 J Q	2690 J Q	3290 J Q	2780 J Q	3520 J Q	3140 J Q
6010C	7440-23-5	Sodium	mg/kg	86.7 J Z	94.3 J Z	69.4 J Z	84.3 J Z	74.5 J Z	88.5 J Z	80.8 J Z	89.2 J Z
6010C	7440-31-5	Tin	mg/kg	10.2 U B	10.1 U B	9.90 U B	8.14 J Z	10.2 U B	10.3 U B	11.1 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1100	1140	999	1080	1040	1270	1140	1260
6010C	7440-36-0	Antimony	mg/kg	4.06 UJ B, Q	4.05 UJ B, Q	3.96 UJ B, Q	4.92 J Q	4.07 UJ B, Q	4.13 UJ B, Q	4.46 UJ B, Q	4.12 UJ B, Q
6010C	7440-38-2	Arsenic	mg/kg	5.2	5.75	4.33	3.53 J Z	4.83	5.38	5.2	5.59
6010C	7440-39-3	Barium	mg/kg	91.4	60.7	89	93.7	97.4	96	100	99.3
6010C	7440-41-7	Beryllium	mg/kg	0.701 J Z	0.607 J Z	0.516 J Z	0.673 J Z	0.545 J Z	0.781 J Z	0.548 J Z	0.753 J Z
6010C	7440-42-8	Boron	mg/kg	2.52 J Z	1.61 J Z	2.49 J Z	1.66 J Z	2.52 J Z	2.18 J Z	2.89 J Z	2.20 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.214 J Z	0.143 J Z	0.269 J Z	1.09	0.307 J Z	0.207 J Z	0.332 J Z	0.278 J Z
6010C	7440-47-3	Chromium	mg/kg	21.4	19.1	16.7	20.6	18.1	22.5	19.5	22.6
6010C	7440-48-4	Cobalt	mg/kg	6.22	4.39	4.91 J E	7.52 J E	5.41 J E	6.62 J E	5.52 J E	6.29 J E
6010C	7440-50-8	Copper	mg/kg	10.2	8.51	8.83	9.55	10.2	10.1	10.5	12
6010C	7440-62-2	Vanadium	mg/kg	37	36.1	28.8	37.2	31.2	43	32.3	42.6
6010C	7440-66-6	Zinc	mg/kg	48.4	40.9	46.2	49.2	50.7	50.8	50.6	53.8
6010C	7440-67-7	Zirconium	mg/kg	3.95 J Z	3.50 J Z	3.36 J Z	4.10 J Z	3.52 J Z	4.74 J Z	4.08 J Z	4.60 J Z
6010C	7440-70-2	Calcium	mg/kg	2160 J Q	1850 J Q	1820	2050	1970	2200	2000	2300
6010C	7723-14-0	Phosphorus	mg/kg	242 J Q	121 J Q	357	511	376	342	373	434
6020A	7440-22-4	Silver	mg/kg	0.0350 J Z	0.0581 J Z	0.0443 J Z	0.0338 J Z	0.0456 J Z	0.0541 J Z	0.0354 J Z	0.0475 J Z
6020A	7440-24-6	Strontium	mg/kg	23.2 J Q	17.2 J Q	18.3	20.3	22.6	22.6	21.8	24.8
6020A	7440-28-0	Thallium	mg/kg	0.228	0.239	0.217	0.278	0.283	0.328	0.277	0.291
6020A	7782-49-2	Selenium	mg/kg	0.406 U	0.405 U	0.0998 J Z	0.127 J Z	0.150 J Z	0.110 J Z	0.146 J Z	0.151 J Z

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				Sample Name	SL-837-SA5A-SB-0.0-0.5	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5
				Sample Type	N	FD	N	FD	N	N	N	N
				Sample Date	05/30/2013	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013
				SDG	PH043	PH043	PH043	PH044	PH044	PH044	PH044	PH044
				Start Depth	0	4.5	4.5	0	0	0	0	0
				End Depth	0.5	5.5	5.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	14300	23500	33700	15300	15300	14900	18100	24500
6010C	7439-89-6	Iron	mg/kg	19200	25900	43000	21100	20800	21100	26000	25100
6010C	7439-92-1	Lead	mg/kg	14.2	8.69 J FD	18.6 J FD	9.58	6.56	11.6	12.3	7.83
6010C	7439-93-2	Lithium	mg/kg	19.7	41	61	19.5	19.3	18.8	26.9	23.4
6010C	7439-95-4	Magnesium	mg/kg	3700	4930 J FD	10000 J FD	4070	4100	3940	5340	4440
6010C	7439-96-5	Manganese	mg/kg	323 J E	299 J FD, E	518 J FD, E	372	281	390	410	240
6010C	7439-98-7	Molybdenum	mg/kg	2.06 U F	2.05 U F	2.12 U F	2.04 U B, F	2.01 U B, F	2.12 U B, F	2.24 U B, F	2.03 U B, F
6010C	7440-02-0	Nickel	mg/kg	12.5	13.5 J FD	27.0 J FD	13.5 J A	12.9 J A	13.4 J A	16.4 J A	12.7 J A
6010C	7440-09-7	Potassium	mg/kg	3580 J Q	1930 J Q	2000 J Q	4040	4040	3820	4960	2000
6010C	7440-23-5	Sodium	mg/kg	77.9 J Z	123	190	65.5 J Z	68.6 J Z	64.7 J Z	91.8 J Z	86.1 J Z
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.3 U B	10.6 U B	10.2 U B	10.1 U B	10.6 U B	11.2 U B	10.1 U B
6010C	7440-32-6	Titanium	mg/kg	1160	1240	1460	1150	1140	1080	1450	1090
6010C	7440-36-0	Antimony	mg/kg	4.11 UJ B, Q	4.10 UJ B, FD, Q	4.24 UJ B, FD, Q	4.09 UJ B, Q	4.03 UJ B, Q	4.23 UJ B, Q	4.48 UJ B, Q	4.06 UJ B, Q
6010C	7440-38-2	Arsenic	mg/kg	4.82	7.84 J FD	3.74 J FD, Z	4.38	4.41	4.61	4.97	6.22
6010C	7440-39-3	Barium	mg/kg	97.8	102 J FD	171 J FD	106	103	111	123	117
6010C	7440-41-7	Beryllium	mg/kg	0.575 J Z	0.884 J FD, Z	1.66 J FD	0.627 J Z	0.616 J Z	0.642 J Z	0.729 J Z	0.993 J Z
6010C	7440-42-8	Boron	mg/kg	2.88 J Z	1.63 J FD, Z	10.6 UJ FD	3.26 J Z	3.37 J Z	2.72 J Z	3.50 J Z	1.92 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.394 J Z	0.187 J FD, Z	0.0392 J FD, Z	0.364 J Z	0.321 J Z	0.343 J Z	0.407 J Z	0.135 J Z
6010C	7440-47-3	Chromium	mg/kg	20.4	23.5 J FD	51.2 J FD	21.8	21.7	20.8	24.9	25.4
6010C	7440-48-4	Cobalt	mg/kg	5.54 J E	6.77 J FD, E	13.1 J FD, E	6.49	6.05	6.4	7.37	6.7
6010C	7440-50-8	Copper	mg/kg	11.6	10.6 J FD	28.7 J FD	12.4	11.9	11.1	13.5	9.31
6010C	7440-62-2	Vanadium	mg/kg	33.8	47.2 J FD	82.3 J FD	36.4	35.8	36.9	46.9	47.5
6010C	7440-66-6	Zinc	mg/kg	57.2	52.7	80.6	60.1	58.3	55.9	76.4	45.2
6010C	7440-67-7	Zirconium	mg/kg	3.21 J Z	5.05 J Z	6.9	3.72 J Z	3.32 J Z	3.41 J Z	4.42 J Z	3.66 J Z
6010C	7440-70-2	Calcium	mg/kg	2220	2710 J FD	5340 J FD	1550 J Q	1590 J Q	2170 J Q	3210 J Q	2470 J Q
6010C	7723-14-0	Phosphorus	mg/kg	408	323	464	423 J Q	401 J Q	437 J Q	597 J Q	218 J Q
6020A	7440-22-4	Silver	mg/kg	0.158 J Z	0.0464 J Z	0.0457 J Z	0.0416 J E, Z	0.0398 J Z	0.0450 J E, Z	0.254 J E	0.0548 J E, Z
6020A	7440-24-6	Strontium	mg/kg	19.1	23.4 J FD	45.7 J FD	19.6 J Q	18.5 J Q	22.1 J Q	25.3 J Q	26.6 J Q
6020A	7440-28-0	Thallium	mg/kg	0.26	0.274	0.309	0.268	0.261	0.256	0.387	0.221
6020A	7782-49-2	Selenium	mg/kg	0.131 J Z	0.126 J Z	0.149 J Z	0.103 J E, Z	0.150 J Z	0.128 J E, Z	0.136 J E, Z	0.184 J E, Z

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			Sample Name	SL-842-SA5A-SB-0.0-0.5	SL-844-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/29/2013	06/07/2013	06/07/2013	06/07/2013	07/29/2013	06/14/2013	07/29/2013
			SDG	PH042	PH042	PH051	PH051	PH051	PH077	PH057	PH077
			Start Depth	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	14600	14500	18500	16600	16700	17200	17000 J E, A	15400
6010C	7439-89-6	Iron	mg/kg	18700	17900	21500	20200	20100	22000	21000 J E, A	20600
6010C	7439-92-1	Lead	mg/kg	9.37	5.9	8.18	6.67	11	7.14	6.55 J Q	8.79
6010C	7439-93-2	Lithium	mg/kg	18.5	18.3	23.2	21.3	21.8	21.5	22.5 J Q, E, A	19.4
6010C	7439-95-4	Magnesium	mg/kg	3630	3350	4260	4100	4190	4360	4280 J E, A	4180
6010C	7439-96-5	Manganese	mg/kg	311	258	329	352	363	355 J E	310 J A	334 J E
6010C	7439-98-7	Molybdenum	mg/kg	1.98 U B, F	1.97 U B, F	2.08 U F, B	1.95 U F, B	1.97 U F, B	2.01 U F, B	1.98 UJ F, B, Q	1.97 U F, B
6010C	7440-02-0	Nickel	mg/kg	12.3 J A	10.6 J A	13.8	13.2	13.7	14.7 J A	12.8 J Q	13.6 J A
6010C	7440-09-7	Potassium	mg/kg	3440	2320	3360	3760	4110	3570	2460 J Q, E, A	3860
6010C	7440-23-5	Sodium	mg/kg	63.4 J Z	61.9 J Z	85.5 J Z	76.3 J Z	84.6 J Z	69.5 J Z	156 J Q, E	70.6 J Z
6010C	7440-31-5	Tin	mg/kg	9.90 U B	9.83 U B	10.4 U B	9.77 U B	9.87 U B	10.1 U B	9.88 UJ B, Q	9.83 U B
6010C	7440-32-6	Titanium	mg/kg	1020	921	1270	1210	1230	1100	1190 J A	1100
6010C	7440-36-0	Antimony	mg/kg	3.96 UJ B, Q	3.93 UJ B, Q	0.697 J Z	0.814 J Z	0.681 J Z	4.03 UJ Q	3.95 UJ Q	3.93 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	4.67	4.75	5.55	4.91	4.67	3.31 J Z	2.68 J Q, Z	2.52 J Z
6010C	7440-39-3	Barium	mg/kg	100	79.7	104	118	124	114	96.5 J Q, A	112
6010C	7440-41-7	Beryllium	mg/kg	0.603 J Z	0.611 J Z	0.761 J Z	0.678 J Z	0.674 J Z	0.662 J Z	0.648 J Z	0.594 J Z
6010C	7440-42-8	Boron	mg/kg	2.63 J Z	2.28 J Z	7.96 J Z	8.16 J Z	8.23 J Z	1.48 J Z	4.22 J Q, Z	1.73 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.308 J Z	0.182 J Z	0.548 J Z	0.609 J Z	0.628 J Z	0.175 J Z	0.988 UJ Q	0.210 J Z
6010C	7440-47-3	Chromium	mg/kg	19.2	18.1	22.4	21.2	21.2	22.8	23.0 J Q, A	21.8
6010C	7440-48-4	Cobalt	mg/kg	5.61	5.04	6	5.57	5.65	6.55 J E	5.52 J Q	5.93 J E
6010C	7440-50-8	Copper	mg/kg	10.5	7.84	9.74	10.5	10.7	16.7	8.80 J Q	16.3
6010C	7440-62-2	Vanadium	mg/kg	33.3	32	41.3	37.8	37.9	38.2	39.2 J Q, A	36.4
6010C	7440-66-6	Zinc	mg/kg	56.1	41.2	56.9	58.1	63.2	57.4	52.6 J Q	59
6010C	7440-67-7	Zirconium	mg/kg	3.42 J Z	3.40 J Z	3.71 J Z	3.90 J Z	3.57 J Z	5.03 U	1.70 J Q, E, Z	4.91 U
6010C	7440-70-2	Calcium	mg/kg	2160 J Q	1640 J Q	1940	2360	2710	1940	2180 J E, A	2240
6010C	7723-14-0	Phosphorus	mg/kg	327 J Q	222 J Q	336	381	418	387 J Q	230 J Q	348 J Q
6020A	7440-22-4	Silver	mg/kg	0.0605 J Z	0.0479 J Z	0.0467 J Z	0.0371 J Z	0.0515 J Z	0.0316 J Z	0.0417 J Q, Z	0.0426 J Z
6020A	7440-24-6	Strontium	mg/kg	22.0 J Q	16.1 J Q	21.8	24.7	28	21.7	25.9 J Q	22.3
6020A	7440-28-0	Thallium	mg/kg	0.235	0.203	0.294	0.255	0.261	0.294	0.303	0.265
6020A	7782-49-2	Selenium	mg/kg	0.102 J Z	0.393 U	0.164 J Z	0.128 J Z	0.128 J Z	0.169 J Z	0.134 J Z	0.174 J Z

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				Sample Name	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5
				Sample Type	FD	N	N	N	N	N	N	N
				Sample Date	06/14/2013	06/14/2013	06/14/2013	07/29/2013	07/29/2013	06/18/2013	06/18/2013	06/18/2013
				SDG	PH057	PH057	PH057	PH077	PH077	PH059	PH059	PH059
				Start Depth	0	0	4.5	0	3.5	0	4	0
				End Depth	0.5	0.5	5.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	16000 J E, A	14200 J E, A	20400 J E, A	15300	18700	14500	12400	15200
6010C	7439-89-6	Iron	mg/kg	21800 J E, A	18000 J E, A	24400 J E, A	20200	23900	18300	21600	20600
6010C	7439-92-1	Lead	mg/kg	8.94 J Q	7.29 J Q	7.62 J Q	8	6.35	6.19	3.9	11.6
6010C	7439-93-2	Lithium	mg/kg	21.8 J Q, E, A	19.6 J Q, E, A	27.1 J Q, E, A	20.8	30.3	18.6	21.1	20.3
6010C	7439-95-4	Magnesium	mg/kg	4390 J E, A	3800 J E, A	4680 J E, A	4220	4950	3700	5060	4020
6010C	7439-96-5	Manganese	mg/kg	337 J A	275 J A	362 J A	323	350 J E	313	238	364
6010C	7439-98-7	Molybdenum	mg/kg	1.94 UJ F, FD, B, Q	1.99 UJ F, FD, B, Q	2.15 UJ F, B, Q	2.04 U F	2.08 U F, B	2.04 U F, B	2.00 U F, B	1.97 U F, B
6010C	7440-02-0	Nickel	mg/kg	13.4 J Q	11.1 J Q	13.9 J Q	12.9	13.7 J A	11.8	11.9	13.4
6010C	7440-09-7	Potassium	mg/kg	3890 J Q, E, A	3510 J Q, E, A	2210 J Q, E, A	3710	2430	3400	2250	3810
6010C	7440-23-5	Sodium	mg/kg	82.5 J Q, E, Z	75.7 J Q, E, Z	103 J Q, E, Z	75.8 J Z	140	81.0 J Z	158	74.4 J Z
6010C	7440-31-5	Tin	mg/kg	9.69 UJ B, Q	9.97 UJ B, Q	10.7 UJ B, Q	10.2 U B	10.4 U B	10.2 U B	10.0 U B	9.83 U B
6010C	7440-32-6	Titanium	mg/kg	1160 J A	1100 J A	1230 J A	970	1170	1070	1290	1190
6010C	7440-36-0	Antimony	mg/kg	3.87 UJ Q	3.99 UJ Q	4.30 UJ Q	4.09 U	4.16 UJ Q	4.07 U	4.00 U	3.93 U
6010C	7440-38-2	Arsenic	mg/kg	2.86 J Q, Z	1.99 J Q, Z	3.64 J Q, Z	3.79 J Z	4.95	2.00 J Z	4.93	2.39 J Z
6010C	7440-39-3	Barium	mg/kg	107 J Q, A	89.2 J Q, A	93.5 J Q, A	108	91.3	95	58.5	112
6010C	7440-41-7	Beryllium	mg/kg	0.591 J Z	0.487 J Z	0.727 J Z	0.633 J Z	0.753 J Z	0.511 J Z	0.383 J Z	0.564 J Z
6010C	7440-42-8	Boron	mg/kg	4.03 J Q, Z	4.14 J Q, Z	3.38 J Q, Z	7.21 J Z	10.4 U	3.69 J Z	2.07 J Z	4.50 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.969 UJ Q	0.997 UJ Q	1.07 UJ Q	0.236 J Z	1.04 U	1.02 U	1.00 U	0.983 U
6010C	7440-47-3	Chromium	mg/kg	22.4 J Q, A	19.0 J Q, A	25.4 J Q, A	21.1	23.7	20.4	22.9	21
6010C	7440-48-4	Cobalt	mg/kg	5.64 J Q	4.41 J Q	6.67 J Q	5.37	6.17 J E	4.89	5.33	5.77
6010C	7440-50-8	Copper	mg/kg	11.0 J Q	9.27 J Q	9.72 J Q	12.1	14.9	9.87	9.16	10.7
6010C	7440-62-2	Vanadium	mg/kg	38.5 J Q, A	31.2 J Q, A	42.9 J Q, A	36.1	42.6	32.5	41.3	37.4
6010C	7440-66-6	Zinc	mg/kg	60.4 J Q	49.7 J Q	50.9 J Q	58.7	52.6	49.1	54.1	59.8
6010C	7440-67-7	Zirconium	mg/kg	0.997 J Q, E, Z	1.42 J Q, E, Z	1.46 J Q, E, Z	4.00 J Z	5.20 U	1.74 J Z	5.00 U	1.32 J Z
6010C	7440-70-2	Calcium	mg/kg	2560 J E, A	2240 J E, A	2310 J E, A	2410	2350	1930	2650	2380
6010C	7723-14-0	Phosphorus	mg/kg	423 J Q	337 J Q	213 J Q	393	267 J Q	348	396	425
6020A	7440-22-4	Silver	mg/kg	0.194 UJ F, Q	0.199 UJ F, Q	0.215 UJ F, Q	0.0570 J Z	0.0451 J Z	0.0548 J Z	0.200 U	0.0785 J Z
6020A	7440-24-6	Strontium	mg/kg	29.9 J Q	25.3 J Q	26.4 J Q	25.5	19.3	27.4	18.4	28
6020A	7440-28-0	Thallium	mg/kg	0.319	0.337	0.307	0.3	0.273	0.343	0.295	0.326
6020A	7782-49-2	Selenium	mg/kg	0.170 J Z	0.164 J Z	0.133 J Z	0.132 J Z	0.139 J Z	0.169 J Z	0.160 J Z	0.153 J Z

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			Sample Name	SL-858-SA5A-SB-0.0-0.5	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/05/2013	06/19/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013	06/05/2013	06/05/2013
			SDG	PH047	PH060	PH059	PH059	PH059	PH047	PH047	PH047
			Start Depth	0	0	0	4	10.5	0	4	7
			End Depth	0.5	0.5	0.5	5	11.5	0.5	5	8
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16500	16300	16600	23700	11000	16100	21600	22300
6010C	7439-89-6	Iron	mg/kg	23100	22300	21700	29200	15500	23800	28500	28200
6010C	7439-92-1	Lead	mg/kg	26.2	67	8.28	8.52	3.32	69.6	9.37	8.74
6010C	7439-93-2	Lithium	mg/kg	22.8	23.6	23	32.2	18.1	23	28.2	28.5
6010C	7439-95-4	Magnesium	mg/kg	5270	5040	4380	6060	3270	4840	5390	4680
6010C	7439-96-5	Manganese	mg/kg	358	328 J E	401	378	139	320	212	172
6010C	7439-98-7	Molybdenum	mg/kg	2.06 U F, B	2.01 U F, B	2.00 U F, B	2.10 U F, B	2.02 U	2.05 U F, B	2.20 U F, B	2.17 U F, B
6010C	7440-02-0	Nickel	mg/kg	14.1	14.5	15.5	16.1	6.01	13	10.9	9.48
6010C	7440-09-7	Potassium	mg/kg	3650	4770 J Q	4200	2180	1290	3460	2040	1800
6010C	7440-23-5	Sodium	mg/kg	87.1 J Z	78.1 J Z	81.2 J Z	121	123	85.7 J Z	94.9 J Z	114
6010C	7440-31-5	Tin	mg/kg	10.3 U B	10.1 U B	9.98 U B	10.5 U B	10.1 U B	10.3 U B	11.0 U B	10.9 U B
6010C	7440-32-6	Titanium	mg/kg	1210	1250	1310	1420	997	1230	1360	1290
6010C	7440-36-0	Antimony	mg/kg	4.12 U	4.02 UJ Q	3.99 U	4.20 U	4.05 U	4.10 U	4.41 U	4.34 U
6010C	7440-38-2	Arsenic	mg/kg	4.00 J Z	4.98	2.91 J Z	5.03	2.57 J Z	4.71	7.2	7.12
6010C	7440-39-3	Barium	mg/kg	103	102	126	107	46.6	101	60.8	52.1
6010C	7440-41-7	Beryllium	mg/kg	0.567 J Z	0.623 J Z	0.624 J Z	0.809 J Z	0.418 J Z	0.606 J Z	0.848 J Z	0.748 J Z
6010C	7440-42-8	Boron	mg/kg	2.88 J Z	10.1 U B	5.63 J Z	5.34 J Z	2.45 J Z	3.52 J Z	1.38 J Z	1.64 J Z
6010C	7440-43-9	Cadmium	mg/kg	0.694 J Z	0.432 J Z	0.998 U	1.05 U	1.01 U	0.568 J Z	1.10 U F	1.09 U F
6010C	7440-47-3	Chromium	mg/kg	25.1	24.1	23.6	29.9	14.9	34.2	27.6	24.3
6010C	7440-48-4	Cobalt	mg/kg	7.71	6.05 J E	6.19	11.4	2.29	6.17	4.65	3.78
6010C	7440-50-8	Copper	mg/kg	10.3 U	12.4 J A	12	13.8	6.08	10.3 U	15.1	12.4
6010C	7440-62-2	Vanadium	mg/kg	42.4	41.5	39.4	53.1	27.6	41.9	52.5	49.6
6010C	7440-66-6	Zinc	mg/kg	190	88.2	59.4	59	32.5	108	49.2	42.8
6010C	7440-67-7	Zirconium	mg/kg	0.902 J Z	3.89 J Z	4.99 U	1.53 J Z	1.02 J Z	0.941 J Z	1.70 J Z	1.53 J Z
6010C	7440-70-2	Calcium	mg/kg	3370	3620	2660	2880	1520	3670	2300	2020
6010C	7723-14-0	Phosphorus	mg/kg	528	591	437	231	102	474	196	186
6020A	7440-22-4	Silver	mg/kg	0.0750 J Z	0.173 J Z	0.0661 J Z	0.0416 J Z	0.249	0.0831 J Z	0.0513 J Z	0.0767 J Z
6020A	7440-24-6	Strontium	mg/kg	19	33.6 J Q	26.9	38.8	21.2	21.8	28.3	25
6020A	7440-28-0	Thallium	mg/kg	0.231	0.361	0.352	0.375	0.246	0.264	0.26	0.233
6020A	7782-49-2	Selenium	mg/kg	0.135 J Z	0.187 J Z	0.175 J Z	0.111 J Z	0.405 U	0.157 J Z	0.441 U	0.110 J Z

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				Sample Name	SL-862-SA5A-SB-0.0-0.5	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	06/06/2013	06/06/2013	06/19/2013	06/19/2013	06/18/2013	06/18/2013	06/19/2013	06/19/2013
				SDG	PH050	PH050	PH060	PH060	PH059	PH059	PH060	PH060
				Start Depth	0	4.5	0	4	0	4	0	4
				End Depth	0.5	5.5	0.5	5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
6010C	7429-90-5	Aluminum	mg/kg	15400	14000	11300	20100	17300	22300	18900	16400
6010C	7439-89-6	Iron	mg/kg	19800	17900	16900	22100	22700	25200	20800	21100
6010C	7439-92-1	Lead	mg/kg	33.1	4.11	16.5	7.44	14.6	7.53	10.5	9.02
6010C	7439-93-2	Lithium	mg/kg	23	25.8	16.9	23.8	24.3	23	21.8	21.5
6010C	7439-95-4	Magnesium	mg/kg	4390	4170	3400	4570	4820	5650	4300	4430
6010C	7439-96-5	Manganese	mg/kg	308	290	258 J E	324 J E	363	216	294 J E	352 J E
6010C	7439-98-7	Molybdenum	mg/kg	2.03 U F, B	2.06 U	2.04 U F	2.07 U F, B	2.05 U F, B	2.08 U F, B	2.00 U F, B	2.06 U F, B
6010C	7440-02-0	Nickel	mg/kg	13.9	8.96	9.29	13	14.6	22.9	13.5	14.5
6010C	7440-09-7	Potassium	mg/kg	3400	2070	2620 J Q	2850 J Q	4010	1940	3300 J Q	3730 J Q
6010C	7440-23-5	Sodium	mg/kg	70.4 J Z	95.0 J Z	58.4 J Z	89.9 J Z	80.0 J Z	95.6 J Z	113	94.0 J Z
6010C	7440-31-5	Tin	mg/kg	10.1 U B	10.3 U B	10.2 U B	10.4 U B	10.2 U B	10.4 U B	10.0 U B	10.3 U B
6010C	7440-32-6	Titanium	mg/kg	1140	1120	898	1210	1280	1330	1230	1190
6010C	7440-36-0	Antimony	mg/kg	4.06 UJ Q	4.11 UJ Q	4.08 UJ Q	4.15 UJ Q	4.10 U	0.786 J Z	4.00 UJ Q	4.11 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	5.58	4.4	3.73 J Z	5.36	3.24 J Z	4.53	4.74	5.02
6010C	7440-39-3	Barium	mg/kg	98.1	74	71.4	99	113	93.6	105	113
6010C	7440-41-7	Beryllium	mg/kg	0.647 J Z	0.613 J Z	0.445 J Z	0.781 J Z	0.614 J Z	0.585 J Z	0.679 J Z	0.646 J Z
6010C	7440-42-8	Boron	mg/kg	3.23 J Z	1.90 J Z	10.2 U B	10.4 U B	4.70 J Z	3.63 J Z	10.0 U B	10.3 U B
6010C	7440-43-9	Cadmium	mg/kg	1.01 U F	1.03 U	0.255 J Z	0.103 J Z	1.02 U	1.04 U	0.188 J Z	0.228 J Z
6010C	7440-47-3	Chromium	mg/kg	22.3	13.5	15.1	21.1	23.5	45.8	21.6	22.3
6010C	7440-48-4	Cobalt	mg/kg	5.88	4.4	4.41 J E	5.95 J E	6.25	6.07	5.60 J E	5.75 J E
6010C	7440-50-8	Copper	mg/kg	13.5 J A	5.61 J A	7.83 J A	8.78 J A	11.9	10.4	8.13 J A	9.88 J A
6010C	7440-62-2	Vanadium	mg/kg	41.4	30.2	30.7	40.4	41.1	52.9	41.1	39.4
6010C	7440-66-6	Zinc	mg/kg	86.4	52.3	104	54.6	88.2	53	54.2	58.1
6010C	7440-67-7	Zirconium	mg/kg	2.70 J Z	2.26 J Z	1.87 J Z	3.81 J Z	5.12 U	1.11 J Z	3.89 J Z	3.03 J Z
6010C	7440-70-2	Calcium	mg/kg	3130	1790	2300	1960	3330	2710	2510	2390
6010C	7723-14-0	Phosphorus	mg/kg	467	264	365	294	482	216	328	396
6020A	7440-22-4	Silver	mg/kg	0.113 J Z	0.206 U	0.0615 J Z	0.0547 J Z	0.0674 J Z	0.0294 J Z	0.0803 J Z	0.0888 J Z
6020A	7440-24-6	Strontium	mg/kg	25.3 J E, Q, A	20.3 J E, Q, A	15.4 J Q	30.2 J Q	27.5	27.4	39.7 J Q	40.8 J Q
6020A	7440-28-0	Thallium	mg/kg	0.385 J Q	0.282 J Q	0.204	0.374	0.309	0.259	0.418	0.469
6020A	7782-49-2	Selenium	mg/kg	0.210 J Z	0.411 U	0.157 J Z	0.143 J Z	0.128 J Z	0.149 J Z	0.263 J Z	0.244 J Z

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			Sample Name	SL-865-SA5A-SB-9.0-10.0	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-0.0-0.5	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/19/2013	06/19/2013	06/19/2013	06/20/2013	06/20/2013	06/20/2013	06/20/2013	06/14/2013
			SDG	PH060	PH060	PH060	PH061	PH061	PH061	PH061	PH057
			Start Depth	9	0	5.5	0	3.5	0	4	0
			End Depth	10	0.5	6.5	0.5	4.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
6010C	7429-90-5	Aluminum	mg/kg	16000	18200	17400	22100	16400	21200	17600	16300 J E, A
6010C	7439-89-6	Iron	mg/kg	39700	21600	25000	24100	23200	22800	25600	22500 J E, A
6010C	7439-92-1	Lead	mg/kg	10.2	9.4	8.07	11.1	7.78	9.74	7.99	6.68 J Q
6010C	7439-93-2	Lithium	mg/kg	28.6	22.5	27.7	25.3	27.9	26.8	29.2	24.5 J Q, E, A
6010C	7439-95-4	Magnesium	mg/kg	6810	4500	5550	4870	5030	5000	5630	4750 J E, A
6010C	7439-96-5	Manganese	mg/kg	336 J E	304 J E	357 J E	310 J E	319 J E	277 J E	322 J E	300 J A
6010C	7439-98-7	Molybdenum	mg/kg	2.08 U F	2.02 U F, B	2.08 U F, B	1.99 U F, B	2.06 U F, B	1.97 U F, B	2.02 U F, B	1.99 UJ F, B, Q
6010C	7440-02-0	Nickel	mg/kg	31.4	15	18	15.6	16.8	16.5	18	15.1 J Q
6010C	7440-09-7	Potassium	mg/kg	2220 J Q	3590 J Q	3140 J Q	3810 J Q	3540 J Q	2870 J Q	3000 J Q	3660 J Q, E, A
6010C	7440-23-5	Sodium	mg/kg	145	82.0 J Z	90.8 J Z	93.1 J Z	89.5 J Z	87.8 J Z	89.9 J Z	80.5 J Q, E, Z
6010C	7440-31-5	Tin	mg/kg	10.4 U B	10.1 U B	10.4 U B	9.94 U B	10.3 U B	9.87 U B	10.1 U B	9.95 UJ B, Q
6010C	7440-32-6	Titanium	mg/kg	1320	1210	1240	1250	1220	1220	1230	1210 J A
6010C	7440-36-0	Antimony	mg/kg	4.16 UJ Q	4.03 UJ Q	4.17 UJ Q	3.97 UJ Q	4.12 UJ Q	3.95 UJ Q	4.04 UJ Q	3.98 UJ Q
6010C	7440-38-2	Arsenic	mg/kg	20.8	5.4	7.33	6.86	6.17	6.08	7.63	2.96 J Q, Z
6010C	7440-39-3	Barium	mg/kg	71	105	91.1	108	93.4	101	94.8	95.9 J Q, A
6010C	7440-41-7	Beryllium	mg/kg	0.973 J Z	0.700 J Z	0.752 J Z	0.808 J Z	0.670 J Z	0.766 J Z	0.726 J Z	0.581 J Z
6010C	7440-42-8	Boron	mg/kg	10.4 U	10.1 U B	10.4 U B	9.94 U B	10.3 U B	9.87 U B	10.1 U B	3.62 J Q, Z
6010C	7440-43-9	Cadmium	mg/kg	0.235 J Z	0.207 J Z	0.185 J Z	0.162 J Z	0.214 J Z	0.185 J Z	0.198 J Z	0.995 UJ Q
6010C	7440-47-3	Chromium	mg/kg	38.8	22.2	27.7	25	25.3	26	28.4	24.3 J Q, A
6010C	7440-48-4	Cobalt	mg/kg	7.46 J E	5.76 J E	7.46 J E	6.50 J E	6.27 J E	5.90 J E	6.69 J E	5.91 J Q
6010C	7440-50-8	Copper	mg/kg	20.5 J A	8.86 J A	12.1 J A	8.50 J A	10.2 J A	9.09 J A	12.2 J A	11.5 J Q
6010C	7440-62-2	Vanadium	mg/kg	64.9	41.6	46.7	46.9	41.4	44.7	46.6	38.8 J Q, A
6010C	7440-66-6	Zinc	mg/kg	82	58.6	65.5	65	63.7	57.4	65.3	60.1 J Q
6010C	7440-67-7	Zirconium	mg/kg	4.30 J Z	3.73 J Z	3.87 J Z	4.10 J Z	2.89 J Z	3.41 J Z	3.60 J Z	1.40 J Q, E, Z
6010C	7440-70-2	Calcium	mg/kg	3580	2490	2940	2540	2460	2650	3150	2090 J E, A
6010C	7723-14-0	Phosphorus	mg/kg	501	396	486	398	481	381	517	394 J Q
6020A	7440-22-4	Silver	mg/kg	0.129 J Z	0.0779 J Z	0.0839 J Z	0.0960 J Z	0.0452 J Z	0.0722 J Z	0.0684 J Z	0.0361 J Q, Z
6020A	7440-24-6	Strontium	mg/kg	23.0 J Q	31.6 J Q	34.0 J Q	38.8 J Q	19.0 J Q	28.8 J Q	34.4 J Q	20.8 J Q
6020A	7440-28-0	Thallium	mg/kg	0.782	0.394	0.451	0.457	0.31	0.377	0.459	0.362
6020A	7782-49-2	Selenium	mg/kg	0.278 J Z	0.228 J Z	0.237 J Z	0.281 J Z	0.186 J Z	0.237 J Z	0.248 J Z	0.147 J Z

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				Sample Name	SL-870-SA5A-SB-0.0-0.5	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
				Sample Type	N	FD	N	N	N	N
				Sample Date	06/14/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013
				SDG	PH057	PH050	PH050	PH050	PH050	PH050
				Start Depth	0	0	0	0	2.5	0
				End Depth	0.5	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
6010C	7429-90-5	Aluminum	mg/kg	14100 J E, A	14700	15000	15400	21500	25900	
6010C	7439-89-6	Iron	mg/kg	19400 J E, A	19300	19500	19600	22500	23300	
6010C	7439-92-1	Lead	mg/kg	8.41 J Q	5.19	8.56	8.82	6.52	6.31	
6010C	7439-93-2	Lithium	mg/kg	21.6 J Q, E, A	23.9	23.8	23.7	30.6	25.8	
6010C	7439-95-4	Magnesium	mg/kg	4110 J E, A	4410	4520	4400	4970	3950	
6010C	7439-96-5	Manganese	mg/kg	306 J A	315	330	316	301	139	
6010C	7439-98-7	Molybdenum	mg/kg	1.98 UJ F, B, Q	2.01 U F, B	2.00 U F, B	2.00 U F, B	2.06 U F, B	2.19 U F, B	
6010C	7440-02-0	Nickel	mg/kg	11.5 J Q	14.6	15.2	15.5	16.2	12.2	
6010C	7440-09-7	Potassium	mg/kg	3770 J Q, E, A	3590	4040	4020	2340	1440	
6010C	7440-23-5	Sodium	mg/kg	81.5 J Q, E, Z	71.2 J Z	71.7 J Z	70.7 J Z	110	153	
6010C	7440-31-5	Tin	mg/kg	9.89 UJ B, Q	10.0 U B	9.99 U B	10.0 U B	10.3 U B	11.0 U B	
6010C	7440-32-6	Titanium	mg/kg	1170 J A	1140	1210	1190	1230	1120	
6010C	7440-36-0	Antimony	mg/kg	3.95 UJ Q	4.01 UJ Q	4.00 UJ Q	4.00 UJ Q	4.12 UJ Q	4.39 UJ Q	
6010C	7440-38-2	Arsenic	mg/kg	2.20 J Q, Z	5.15	5.07	5.66	7.19	5.86	
6010C	7440-39-3	Barium	mg/kg	93.4 J Q, A	104	108	109	87.7	94.5	
6010C	7440-41-7	Beryllium	mg/kg	0.501 J Z	0.647 J Z	0.644 J Z	0.675 J Z	0.860 J Z	0.821 J Z	
6010C	7440-42-8	Boron	mg/kg	3.86 J Q, Z	3.27 J Z	4.78 J Z	4.82 J Z	4.78 J Z	15.2	
6010C	7440-43-9	Cadmium	mg/kg	0.989 UJ Q	1.00 U	0.999 U	1.00 U	1.03 U	1.10 U	
6010C	7440-47-3	Chromium	mg/kg	19.9 J Q, A	21.9	22.7	24.5	26.9	28.8	
6010C	7440-48-4	Cobalt	mg/kg	4.73 J Q	5.56	5.64	5.6	6.3	3.32	
6010C	7440-50-8	Copper	mg/kg	9.33 J Q	11.8 J A	11.9 J A	12.4 J A	9.94 J A	7.92 J A	
6010C	7440-62-2	Vanadium	mg/kg	33.3 J Q, A	37.6	38.3	39.1	47.3	47	
6010C	7440-66-6	Zinc	mg/kg	57.3 J Q	59.2	64.4	60.3	54.1	37.8	
6010C	7440-67-7	Zirconium	mg/kg	0.901 J Q, E, Z	2.93 J Z	2.94 J Z	2.80 J Z	3.98 J Z	4.62 J Z	
6010C	7440-70-2	Calcium	mg/kg	2200 J E, A	2080	2490	2950	2380	2210	
6010C	7723-14-0	Phosphorus	mg/kg	396 J Q	366	441	386	216	150	
6020A	7440-22-4	Silver	mg/kg	0.0600 J Q, Z	0.0470 J Z	0.0441 J Z	0.0781 J Z	0.0593 J Z	0.0523 J Z	
6020A	7440-24-6	Strontium	mg/kg	20.9 J Q	19.7 J E, Q, A	23.5 J E, Q, A	35.9 J E, Q, A	27.6 J E, Q, A	21.9 J E, Q, A	
6020A	7440-28-0	Thallium	mg/kg	0.282	0.290 J Q	0.308 J Q	0.395 J Q	0.371 J Q	0.248 J Q	
6020A	7782-49-2	Selenium	mg/kg	0.154 J Z	0.140 J Z	0.152 J Z	0.213 J Z	0.207 J Z	0.478	

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			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7
			End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.2	7.4	8.9	9.2	11.3	11.8	4.7	9.6

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			Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-584-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/25/2013
			SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129	PH134
			Start Depth	10	15	0	9	11	11	14	0
			End Depth	11	16	0.5	10	12	12	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	10.9	12.3	7.4	10.3	9.2	10	10	4.2

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			Sample Name	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-630A-SA5A-SB-0.0-0.5	SL-630B-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/11/2013	11/11/2013
			SDG	PH132	PH132	PH136	PH126	PH126	PH126	PH125	PH125
			Start Depth	0	4	0	0	0	6.5	0	0
			End Depth	0.5	5	0.5	0.5	0.5	7.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	5.1	8	3.2	1.7	2.5	7.3	0.72	0.73

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(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-630C-SA5A-SB-0.0-0.5	SL-630D-SA5A-SB-0.0-0.5	SL-631-SA5A-SB-0.0-0.5	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	11/11/2013	11/11/2013	11/25/2013	11/11/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH125	PH125	PH134	PH125	PH128	PH128	PH128	PH128
			Start Depth	0	0	0	0	0	3	3	0
			End Depth	0.5	0.5	0.5	0.5	0.5	4	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	0.73	1.1	2.2	0.61	1.9	3.3	4.3	2.9

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(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH128	PH128	PH128
			Start Depth	4	7	0	4	7	0	3	0
			End Depth	5	8	0.5	5	8	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	6	5.7	3.2	11.3	9.2	4.2	4.1	2.7

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			Sample Name	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	11/22/2013	11/22/2013	11/22/2013	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013
			SDG	PH133	PH133	PH133	PH133	PH133	PH136	PH133	PH133
			Start Depth	0	4	10.5	0	4	0	0	0
			End Depth	0.5	5	11.5	0.5	5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.2	6.8	11.7	4.7	9.5	2.5	2.4	3.7

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			Sample Name	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	FD	N
			Sample Date	11/18/2013	11/18/2013	11/19/2013	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013
			SDG	PH131	PH131	PH132	PH132	PH132	PH131	PH131	PH131
			Start Depth	0	4	0	0	4	0	4	4
			End Depth	0.5	5	0.5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.4	4	1.4	3.8	5.7	2.1	2	2.3

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			Sample Name	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013
			SDG	PH131	PH131	PH135	PH135	PH134	PH134	PH134	PH135
			Start Depth	8	0	0	2.5	0	0	6	0
			End Depth	9	0.5	0.5	3.5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.4	2.1	3.9	5	2.5	2	3.3	3.2

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			Sample Name	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/26/2013	11/18/2013	11/26/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013
			SDG	PH135	PH131	PH135	PH132	PH131	PH131	PH131	PH131
			Start Depth	0	0	0	0	0	2.5	0	3
			End Depth	0.5	0.5	0.5	0.5	0.5	3.5	0.5	4
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.1	3.1	2	3.5	2.3	5.5	5.5	8.9

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			Sample Name	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5	SL-767-SA5A-SB-2.5-3.5	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	FD	N
			Sample Date	11/26/2013	11/26/2013	11/26/2013	11/26/2013	06/04/2013	06/10/2013	06/10/2013	06/10/2013
			SDG	PH135	PH135	PH135	PH135	PH047	PH052	PH052	PH052
			Start Depth	0	3	0	2.5	0	0	0	0
			End Depth	0.5	4	0.5	3.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	5.5	7.8	3	3.2	8.6	1.7	4.5	2

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			Sample Name	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0	SL-1176-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5	SL-1178-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	FD	N	N	N	FD
			Sample Date	06/13/2013	06/10/2013	06/10/2013	06/10/2013	06/10/2013	06/10/2013	06/10/2013	06/12/2013
			SDG	PH056	PH052	PH052	PH053	PH052	PH053	PH053	PH055
			Start Depth	0	0	6	6	6	6	0	0
			End Depth	0.5	0.5	7	7	7	7	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	1.5	1.7	7.5	5.5	6.8	5.7	2.8	3.1

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			Sample Name	SL-778-SA5A-SB-0.0-0.5	SL-778-SA5A-SB-4.0-5.0	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	06/12/2013	06/12/2013	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013
			SDG	PH055	PH055	PH053	PH058	PH058	PH058	PH055	PH055
			Start Depth	0	4	0	0	3	3	0	2
			End Depth	0.5	5	0.5	0.5	4	4	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.6	5.2	2.8	2.3	6.6	4.6	4.8	3.7

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			Sample Name	SL-782-SA5A-SB-0.0-0.5	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013
			SDG	PH055	PH055	PH054	PH054	PH055	PH055	PH054	PH054
			Start Depth	0	4.5	0	0	0	2.5	0	0
			End Depth	0.5	5.5	0.5	0.5	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	5.3	5.8	3.2	2.2	4.1	4	1.3	2.9

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			Sample Name	SL-787-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013
			SDG	PH054	PH054	PH054	PH054	PH056	PH056	PH056	PH056
			Start Depth	0	0	0	5	0	0	0	0
			End Depth	0.5	0.5	0.5	6	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.9	0.79	1.2	6	2.2	1	2.8	1

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			Sample Name	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/13/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	05/31/2013	05/30/2013
			SDG	PH056	PH047	PH047	PH047	PH047	PH047	PH044	PH043
			Start Depth	0	0	5.5	0	0	4	0	0
			End Depth	0.5	0.5	6.5	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.6	1.2	4.7	1.4	2.2	5.4	2.9	3.5

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			Sample Name	SL-819-SA5A-SB-6.5-7.5	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/30/2013	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH043	PH058	PH058	PH058	PH058	PH055	PH055	PH055
			Start Depth	6.5	0	0	0	0	0	4	9
			End Depth	7.5	0.5	0.5	0.5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	10.5	1.8	2.1	1.7	0.91	2.4	8.3	6

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			Sample Name	SL-826-SA5A-SB-14.0-15.0	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/12/2013	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013
			SDG	PH055	PH051	PH041	PH041	PH041	PH041	PH042	PH042
			Start Depth	14	0	0	0	0	2.75	0	4.5
			End Depth	15	0.5	0.5	0.5	0.5	3.75	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.2	1.2	1.5	1.7	2.3	3.7	1.8	4.3

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			Sample Name	SL-832-SA5A-SB-0.0-0.5	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-835-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
			SDG	PH042	PH042	PH042	PH043	PH043	PH043	PH043	PH043
			Start Depth	0	4	7.2	0	2.5	0	2.4	0
			End Depth	0.5	5	8.2	0.5	3.5	0.5	3.4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	1.5	3.5	4	1.9	4	2.6	4.2	8.1

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			Sample Name	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5	SL-837-SA5A-SB-0.0-0.5	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	FD	N	N
			Sample Date	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013
			SDG	PH043	PH043	PH043	PH043	PH043	PH044	PH044	PH044
			Start Depth	0	2.5	0	4.5	4.5	0	0	0
			End Depth	0.5	3.5	0.5	5.5	5.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	13.7	3.9	4.6	5.3	8.4	4.1	4.5	6.4

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			Sample Name	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5	SL-842-SA5A-SB-0.0-0.5	SL-843-SA5A-SB-0.0-0.5	SL-844-SA5A-SB-0.0-0.5	SL-845-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/31/2013	05/31/2013	05/29/2013	05/29/2013	05/29/2013	06/07/2013	06/07/2013	06/07/2013
			SDG	PH044	PH044	PH042	PH042	PH042	PH051	PH051	PH051
			Start Depth	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	11.6	4.3	1	2.1	2.2	1.2	3.7	0.58

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R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	06/07/2013	07/29/2013	06/14/2013	07/29/2013	06/14/2013	06/14/2013	06/14/2013	07/29/2013
			SDG	PH051	PH077	PH057	PH077	PH057	PH057	PH057	PH077
			Start Depth	0	0	0	0	0	0	4.5	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	0.65	2.6	1.7	1.2	0.74	0.67	8.7	2.2

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			Sample Name	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5	SL-858-SA5A-SB-0.0-0.5	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	07/29/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013	06/19/2013	06/18/2013	06/18/2013
			SDG	PH077	PH059	PH059	PH059	PH047	PH060	PH059	PH059
			Start Depth	3.5	0	4	0	0	0	0	4
			End Depth	4.5	0.5	5	0.5	0.5	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	7.5	2.7	3.8	1.2	4.8	1.6	2.7	6.6

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			Sample Name	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0	SL-862-SA5A-SB-0.0-0.5	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/18/2013	06/05/2013	06/05/2013	06/05/2013	06/06/2013	06/06/2013	06/19/2013	06/19/2013
			SDG	PH059	PH047	PH047	PH047	PH050	PH050	PH060	PH060
			Start Depth	10.5	0	4	7	0	4.5	0	4
			End Depth	11.5	0.5	5	8	0.5	5.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	3.1	3.5	9.2	10.6	1.4	3.7	3.8	4.5

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			Sample Name	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-9.0-10.0	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/18/2013	06/18/2013	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/20/2013
			SDG	PH059	PH059	PH060	PH060	PH060	PH060	PH060	PH061
			Start Depth	0	4	0	4	9	0	5.5	0
			End Depth	0.5	5	0.5	5	10	0.5	6.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.4	6.8	2	3.7	6.6	2.8	4	2.3

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			Sample Name	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-0.0-0.5	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5	SL-870-SA5A-SB-0.0-0.5	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	06/20/2013	06/20/2013	06/20/2013	06/14/2013	06/14/2013	06/06/2013	06/06/2013	06/06/2013
			SDG	PH061	PH061	PH061	PH057	PH057	PH050	PH050	PH050
			Start Depth	3.5	0	4	0	0	0	0	0
			End Depth	4.5	0.5	5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
160.3M	MOIST	Moisture	%	2.9	0.66	2.9	2.4	1.8	1.3	2.8	3

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			Sample Name	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
			Sample Type	N	N
			Sample Date	06/06/2013	06/06/2013
			SDG	PH050	PH050
			Start Depth	2.5	0
			End Depth	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit		
160.3M	MOIST	Moisture	%	5.7	9.7

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			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0	SL-518-SA5A-SB-10.0-11.0
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7	10
			End Depth	0.5	5	10	18	22	34	0.5	8	11
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	190 UJ L	190 UJ L	20 UJ L	20 UJ L	20 UJ L	20 UJ L	19 U	20 U	8.4 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	190 UJ L	190 UJ L	20 UJ L	20 UJ L	20 UJ L	20 UJ L	19 U	20 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	18 U	3.8 J Z	1.8 U	1.8 U	1.9 U	1.9 U	1.7	0.67 J Z	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	13 J Z	31	1.8 U	1.4 J Z	1.9 U	1.4 J Z	9	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	190 U	190 U	20 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	15 J Z	23	1.8 U	1.8 U	1.9 U	0.81 J Z	2	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	180 UJ L	100 J L, Z	19 UJ L	19 UJ L	19 UJ L	19 UJ L	18 U	19 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	18 U	9.8 J Z	1.8 U	1.8 U	1.9 U	1.9 U	2	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	37	130	1.8 U	0.92 J Z	0.88 J Z	1.8 J Z	7	7.8	1.1 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	18 U	17 J Z	1.8 U	1.6 J Z	1.0 J Z	1.9 U	6.5	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	18 U	18 U	1.8 U	1.8 U	1.9 U	1.9 U	2.2	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	18 U	18 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	28	130	0.47 J Z	0.39 J Z	1.9 U	0.73 J Z	6.5	1.8 U	0.60 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	20	28	1.8 U	1.8 U	1.9 U	0.77 J Z	4.5	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	7.9 J Z	13 J Z	1.8 U	1.8 U	1.9 U	1.9 U	0.71 J Z	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	13 J Z	32	1.8 U	1.8 U	1.9 U	1.9 U	4.5	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	18 U	18 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	18 U	18 U	1.8 U	1.8 U	1.9 U	1.9 U	1.4 J Z	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	190 U	190 U	20 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	190 U	190 U	20 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	18	53	1.0 J Z	1.8 U	0.77 J Z	1.9 U	7	1.1 J Z	0.89 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	190 U	190 U	20 U	20 U	20 U	20 U	19 U	20 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	18 U	18 U	1.8 U	1.8 U	1.9 U	1.9 U	1.7 U	0.75 J Z	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	18 U	12 J Z	0.74 J Z	1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	0.75 J Z
8270D SIM	91-20-3	Naphthalene	µg/kg	18 U	18 U	1.6 J Z	0.91 J Z	1.9 U	1.9 U	1.7 U	1.8 U	0.88 J Z
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	18 U	16 J Z	1.2 J Z	1.8 U	1.9 U	1.9 U	1.7 U	1.8 U	0.75 J Z

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			Sample Name	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-584-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/25/2013	11/19/2013	11/19/2013
			SDG	PH132	PH129	PH129	PH129	PH129	PH129	PH134	PH132	PH132
			Start Depth	15	0	9	11	11	14	0	0	4
			End Depth	16	0.5	10	12	12	15	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	22 U	22 U	22 U	22 U	22 U	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	21 U	10 J L, Z	20 UJ L	20 UJ L	20 UJ L	20 UJ L	19 U F	19 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	21 U	19 UJ L	20 UJ L	20 UJ L	20 UJ L	20 UJ L	19 UJ C	19 U	20 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.9 U	1.8 U	0.81 J Z	1.8 U	1.9 U	1.8 U	0.41 J Z	1.8 U	1.5 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	1.9 U	1.8 U	1.0 J Z	1.8 U	1.9 U	1.7 J Z	3.1	1.8 U	3.2
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	21 U	19 U	20 U	20 U	20 U	20 U	19 U	19 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.2 J Z	0.99 J Z	1.2 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 UJ L	19 UJ L	19 UJ L	19 UJ L	19 UJ L	18 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	0.86 J Z	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.9 U	1.8 U	1.8	1.9 J FD	0.75 J FD, Z	1.2 J Z	3.1	2.6	3.3
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	3.3	1.8 U	1.4 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.5 J Z	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9 U	0.46 J Z	1.2 J Z	0.65 J Z	0.61 J Z	3	3.1	0.89 J Z	2.3
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.5 J Z	0.80 J Z	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.4 J Z	1.8 U	0.96 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	0.72 J Z	0.75 J Z
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	21 U	19 U	20 U	20 U	20 U	20 U	19 U	19 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	21 U	45	20 U	20 U	20 U	20 U	19 U	19 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.9 U	1.8 U	2.4	1.8 U	1.9 U	2.1	1.6 J Z	1.8 U	19
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	21 U	19 U	20 U	20 U	20 U	20 U	19 U	19 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.9 U	1.8 U	0.86 J Z	1.8 U	1.9 U	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.9 U	1.8 U	1.8 U	1.2 J FD, Z	1.9 UJ FD	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.9 U	1.8 U	1.8 U	1.3 J Z	0.94 J Z	1.8 U	1.7 U	1.8 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.9 U	1.8 U	1.8 U	1.4 J FD, Z	1.9 UJ FD	1.8 U	1.7 U	1.8 U	1.8 U

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			Sample Name	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-631-SA5A-SB-0.0-0.5	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0
			Sample Type	N	N	FD	N	N	N	N	N	FD
			Sample Date	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/25/2013	11/11/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH136	PH126	PH126	PH126	PH134	PH125	PH128	PH128	PH128
			Start Depth	0	0	0	6.5	0	0	0	3	3
			End Depth	0.5	0.5	0.5	7.5	0.5	0.5	0.5	4	4
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	20 U	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U	18 U	18 U	19 U	64 J Z	18 U	18 U	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	18 U	18 U	19 U	180 UJ C	18 U	18 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	0.56 J FD, Z	1.7 UJ FD	1.8 U	17 U	1.7 U	4.9	0.42 J FD, Z	1.7 UJ FD
8270D SIM	129-00-0	Pyrene	µg/kg	2	6.1 J FD, Q	1.7 UJ FD	1.8 U	26	1.1 J Z	33	3.9 J FD	0.90 J FD, Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	18 U	18 U	19 U	180 U	18 U	18 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.2 J Z	3.5 J FD, Q	1.7 UJ FD	1.8 U	9.2 J Z	1.7 U	80	4.5 J FD	1.1 J FD, Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	3.7 J FD, Q, Z	17 UJ FD	18 U	170 U	17 U	87	7.1 J FD, Q, Z	18 UJ FD
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	2.5 J FD, Q	1.7 UJ FD	1.8 U	17 U	1.7 U	90	5.4 J FD	1.1 J FD, Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.3	8.5 J FD, Q	1.7 UJ FD	1.8 U	25	1.6 J Z	150	11 J FD	2.8 J FD
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.3	7.9 J FD, Q	1.7 UJ FD	1.8 U	28	1.4 J Z	39	4.4 J FD	1.1 J FD, Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	0.95 J Z	2.3 J FD, Q	1.7 UJ FD	1.8 U	6.8 J Z	1.7 U	52	3.6 J FD	1.7 UJ FD
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	0.41 J FD, Z	1.7 UJ FD	1.8 U	17 U	1.7 U	1.5 J Z	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.9	5.7 J FD, Q	1.7 UJ FD	1.8 U	26	1.2 J Z	81	6.1 J FD	1.6 J FD, Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.1 J Z	3.5 J FD, Q	1.7 UJ FD	1.8 U	9.2 J Z	1.7 U	98	6.2 J FD	1.2 J FD, Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.0 J FD, Q, Z	1.7 UJ FD	1.8 U	17 U	1.7 U	20	1.5 J FD, Z	1.7 UJ FD
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	2.6 J FD, Q	1.7 UJ FD	1.8 U	9.4 J Z	1.7 U	48	4.1 J FD	0.84 J FD, Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	17 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	17 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	18 U	18 U	19 U	180 U	18 U	18 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	18 U	18 U	19 U	180 U	18 U	18 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	0.91 J Z	3.3 J FD	1.7 UJ FD	1.8 U	18	1.7 U	10	1.6 J FD, Z	1.7 UJ FD
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	18 U	18 U	19 U	180 U	18 U	18 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	17 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	13 J Z	1.7 U	0.75 J Z	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	7.0 J Z	1.7 U	1.3 J Z	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.8 U	12 J Z	1.7 U	1.3 J Z	1.7 U	1.7 U

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			Sample Name	SL-657-SA5A-SB-0.0-0.5	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH128	PH128	PH128	PH128
			Start Depth	0	4	7	0	4	7	0	3	0
			End Depth	0.5	5	8	0.5	5	8	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	0.82 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.6 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.4 J Z	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.3 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.61 J Z	1.7 U	1.7 U	1.7 U	0.43 J Z	1.8 U	1.7 U	1.7 U	1.7
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.1 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	0.92 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.0 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	19 U	18 U	20 U	20 U	19 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	0.88 J Z	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.8 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.5 J Z	1.8 U	1.7 U	1.7 U	0.84 J Z

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			Sample Name	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	FD	N
			Sample Date	11/22/2013	11/22/2013	11/22/2013	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013	11/18/2013
			SDG	PH133	PH133	PH133	PH133	PH133	PH136	PH133	PH133	PH131
			Start Depth	0	4	10.5	0	4	0	0	0	0
			End Depth	0.5	5	11.5	0.5	5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	12 J Z	18 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	18 U	18 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	2.4 J Z	8.9 U	1.9 U	1.7 U	1.8 U	0.51 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	17 J L	12 J L	1.9 U	3.9 J L	1.8 U	12	1.7 U	1.7 U	1.4 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	18 U	18 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	5.9 J Z	8.9 U	1.9 U	1.6 J Z	1.8 U	2.6	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	87 U	91 U	19 U	5.1 J Z	19 U	5.7 J Z	17 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	3.7 J Z	8.9 U	1.9 U	0.91 J Z	1.8 U	1.8	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	21	9	1.9 U	5.7	1.8 U	12	1.7 U	1.7 U	1.7
8270D SIM	206-44-0	Fluoranthene	µg/kg	19	12	1.9 U	3.9	1.8 U	12	1.7 U	1.7 U	0.87 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	5.4 J Z	8.9 U	1.9 U	2.4	1.8 U	3.9	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	8.5 U	8.9 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	21	9.8	1.9 U	7.3	1.8 U	11	0.47 J FD, Z	1.7 UJ FD	0.76 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	8.6	3.9 J Z	1.9 U	2.8	1.8 U	5.3	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	8.5 U	8.9 U	1.9 U	1.7 U	1.8 U	0.80 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	7.2 J Z	4.5 J Z	1.9 U	2	1.8 U	5.6	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	8.5 U	8.9 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	8.5 U	8.9 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	18 U	18 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	18 U	18 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	23	13	1.9 U	1.9	1.8 U	3.7	1.7 U	1.7 U	0.73 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	92 U	97 U	20 U	19 U	20 U	18 U	18 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	8.5 U	8.9 U	1.9 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	13	6.3 J Z	1.9 U	0.71 J Z	1.1 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	8.5	4.6 J Z	1.9 U	1.1 J Z	2	0.90 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	16	8.4 J Z	1.9 U	1.2 J Z	2.4	0.77 J Z	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	FD	N	N	N
			Sample Date	11/18/2013	11/19/2013	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013
			SDG	PH131	PH132	PH132	PH132	PH131	PH131	PH131	PH131	PH131
			Start Depth	4	0	0	4	0	4	4	8	0
			End Depth	5	0.5	0.5	5	0.5	5	5	9	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	12 J FD, Z	18 UJ FD	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	0.49 J FD, Z	1.7 UJ FD	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	2.3 J FD	1.7 UJ FD	1.7 U	1.7 U	0.76 J FD, Z	4.7 J FD	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.1 J FD, Z	1.7 UJ FD	1.7 U	1.7 U	1.7 UJ FD	1.2 J FD, Z	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	17 U	18 U	17 U	17 U	17 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ FD	0.80 J FD, Z	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	31 J FD	1.1 J FD, Q, Z	1.7 U	0.69 J Z	11	17	0.71 J Z	0.78 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	2.2 J FD	1.7 UJ FD	1.7 U	1.7 U	1.7 UJ FD	3.1 J FD	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ FD	0.60 J FD, Z	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	2.0 J FD	1.7 UJ FD	1.7 U	1.7 U	0.74 J FD, Z	1.9 J FD	1.7 U	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	0.91 J FD, Z	1.7 UJ FD	1.7 U	1.7 U	1.7 UJ FD	1.3 J FD, Z	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.72 J FD, Z	1.7 UJ FD	1.7 U	1.7 U	1.7 UJ FD	1.0 J FD, Z	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.9 J FD	1.7 UJ FD	1.7 U	1.7 U	1.7 UJ FD	2.8 J FD	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.74 J Z	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-713-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N	N
			Sample Date	11/26/2013	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/18/2013	11/26/2013
			SDG	PH135	PH135	PH134	PH134	PH134	PH135	PH135	PH131	PH135
			Start Depth	0	2.5	0	0	6	0	0	0	0
			End Depth	0.5	3.5	0.5	0.5	7	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	21 U	20 U	21 U	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	18 J FD	18 UJ F, FD	19 U	18 U	18 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 UJ C	19 U	18 UJ C	18 UJ C	19 UJ C	18 U	18 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	2.8 J FD	0.43 J FD, Q, Z	0.94 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.8 U	21 J FD	2.4 J FD, Q	11	0.74 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	18 U	18 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.8 U	5.9 J FD	0.88 J FD, Q, Z	4.3	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	8.4 J FD, Z	17 UJ FD	5.2 J Z	17 U	17 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	5.7 J FD	1.7 UJ FD	4	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.8 U	16 J FD	2.3 J FD, Q	10	1.7 U	1.7 U	0.73 J Z	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.8 U	28 J FD	2.9 J FD, Q	13	0.82 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.8 U	8.2 J FD	1.3 J FD, Q, Z	5.2	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	1.8 U	15 J FD	2.2 J FD, Q	8.6	0.64 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.8 U	11 J FD	1.3 J FD, Q, Z	6.9	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.8 J FD	1.7 UJ FD	1.3 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.8 U	13 J FD	1.2 J FD, Q, Z	7.8	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	18 U	18 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	18 U	18 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.8 U	12 J FD	1.4 J FD, Q, Z	3.4	1.2 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	18 U	18 U	19 U	18 U	18 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	0.85 J Z	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5	SL-767-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/26/2013	11/26/2013
			SDG	PH132	PH131	PH131	PH131	PH131	PH135	PH135	PH135	PH135
			Start Depth	0	0	2.5	0	3	0	3	0	2.5
			End Depth	0.5	0.5	3.5	0.5	4	0.5	4	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	13 J Z	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.5 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.71 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	18 U	18 U	19 U	18 U	18 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	3.9	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.0 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	2.1	1.8 U	0.36 J Z	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	0.76 J Z	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	18 U	19 U	19 U	20 U	19 U	19 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U

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		Sample Name	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5
		Sample Type	N	N	FD	N	N	N	FD	N	N
		Sample Date	06/04/2013	06/10/2013	06/10/2013	06/10/2013	06/13/2013	06/10/2013	06/10/2013	06/10/2013	06/10/2013
		SDG	PH047	PH052	PH052	PH052	PH056	PH052	PH052	PH052	PH053
		Start Depth	0	0	0	0	0	0	6	6	0
		End Depth	0.5	0.5	0.5	0.5	0.5	0.5	7	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	20 U	6.3 J Z	19 U	18 U	15 J Z	18 U	19 U	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	20 U	100	54 J FD	190 J FD	93	56	19 U	19 U	49
8270D SIM	120-12-7	Anthracene	µg/kg	0.96 J Z	0.92 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	7.4
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	9.6	1.7 U	1.7 U	1.3 J Z	1.1 J Z	1.8 U	1.8 U	100
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	18 U	19 U	18 U	18 U	110	19 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	3.4	1.7 U	1.7 U	0.70 J Z	1.7 U	1.8 U	1.8 U	13
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	5.2 J Z	18 U	17 U	17 U	17 U	18 U	18 U	34
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	2.5	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	16
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	9.2	1.7 U	1.7 U	2.5	1.1 J Z	1.8 U	1.8 U	82
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	11	1.7 U	1.7 U	1.7	1.4 J Z	1.8 U	1.8 U	100
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	2.6	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	39
8270D SIM	208-96-8	Acenaphthylene	µg/kg	0.97 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	9.2	0.61 J FD, Z	1.7 UJ FD	1.7	1.5 J Z	0.50 J Z	0.66 J Q, Z	79
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	3.8	1.7 U	1.7 UJ L	0.85 J Z	1.7 U	1.8 UJ FD	0.79 J FD, Z	48
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	0.88 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	6.6
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	3.2	1.7 U	1.7 U	0.68 J Z	1.7 U	1.8 U	1.8 U	71
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.4 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.6 J Z
8270D SIM	84-66-2	Diethylphthalate	µg/kg	20 U	18 U	19 U	18 U	18 U	18 U	19 U	19 UJ Q	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	18 U	19 U	18 U	18 U	18 U	19 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.0 J Z	5.3	1.7 U	1.7 U	1.0 J Z	1.1 J Z	1.8 U	1.8 U	45
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	18 U	19 U	18 U	7.5 J Z	18 U	19 U	19 UJ Q	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.2 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.4 J Z	0.69 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.3 J Z	1.2 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.6 J Z	0.97 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U

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			Sample Name	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0	SL-782-SA5A-SB-0.0-0.5	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N	FD
			Sample Date	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013	06/12/2013	06/11/2013
			SDG	PH053	PH058	PH058	PH058	PH055	PH055	PH055	PH055	PH054
			Start Depth	0	0	3	3	0	2	0	4.5	0
			End Depth	0.5	0.5	4	4	0.5	3	0.5	5.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	12 J Q, Z	12 J Z	19 U	19 U	9.6 J Z	19 U	10 J Z	12 J Z	9.6 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	22 J Q	120	19 U	19 U	13 J Z	19 U	40	19 U	7.0 J FD, Z
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 J Q	2.8	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.1 J FD, Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 UJ Q	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.81 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 UJ Q	17 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.5 J Q	5.2	0.79 J Z	0.92 J Z	1.7 U	1.7 U	1.8 U	1.8 U	1.8 J FD
8270D SIM	206-44-0	Fluoranthene	µg/kg	2.2 J Q	3.3	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.2 J FD, Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 UJ Q	0.92 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.1 J Q, Z	3.5	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.1 J FD, Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.2 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.90 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 UJ Q	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 UJ Q	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.3 J Q, Z	2.3	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	0.79 J FD, Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 UJ Q	18 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 UJ Q	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 UJ F, Q	1.3 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	0.82 J Z	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U

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		Sample Name	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5	SL-787-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0
		Sample Type	N	N	N	N	N	N	N	N	N
		Sample Date	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013
		SDG	PH054	PH055	PH055	PH054	PH054	PH054	PH054	PH054	PH054
		Start Depth	0	0	2.5	0	0	0	0	0	5
		End Depth	0.5	0.5	3.5	0.5	0.5	0.5	0.5	0.5	6
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	14 J Z	85	10 J Z	100	9.5 J Z	32	62	10 J Z	19 U F
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	94 J FD, I, Q	40	19 U	32	7.9 J Z	8.8 J Z	57	6.9 J Z	7.3 J Z
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	0.52 J Z	0.54 J Z	0.85 J Z	1.7 U	0.92 J Z	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 UJ FD	1.7 U	1.7 U	4	2.5	11	2.2	24	1.2 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 UJ I	1.7 U	1.7 U	1.7 U	0.74 J Z	1.7 U	0.75 J Z	11	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 UJ I	18 U	18 U	17 U	18 U	18 U	17 U	18	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 UJ I	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.71 J Z	11	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 UJ FD, I	0.87 J Z	0.91 J Z	2.1	4.1	4.1	4.2	32	2.3
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 UJ FD	1.7 U	1.7 U	5	3.4	16	2.3	25	1.3 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 UJ I	1.7 U	1.7 U	1.7 U	0.76 J Z	1.1 J Z	1.0 J Z	15	0.81 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.49 J Z	1.7 U	1.7 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 UJ FD	0.46 J Z	1.7 U	2.2	2.6	4.5	2.5	33	1.9
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 UJ I	1.7 U	1.7 U	1.7 U	1.0 J Z	0.91 J Z	1.4 J Z	21	1.2 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 UJ I	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	4.4	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	0.80 J Z	0.80 J Z	1.4 J Z	28	1.7 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 UJ Q	19 U	19 U	18 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	19 U	18 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 UJ FD	1.7 U	1.7 U	2.1	1.6 J Z	15	0.92 J Z	3.3	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	68	19 U	71	19 U	19 U	12 J Z	6.5 J Z	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U

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			Sample Name	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	06/13/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013
			SDG	PH056	PH056	PH056	PH056	PH056	PH047	PH047	PH047	PH047
			Start Depth	0	0	0	0	0	0	5.5	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	6.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	16 J Z	13 J Z	27	41	14 J Z	18 U	19 U	7.0 J Z	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	60	80	100	66	46	18 U	19 U	18 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	0.41 J Z	1.8	1.7 U	1.7 U	1.7 U	0.58 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	1.1 J Z	2.2	1.7 U	2.2	7	1.4 J Z	1.7 U	2	1.5 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	0.99 J Z	1.7 U	0.98 J Z	1.7 U	1.7 U	1.7 U	0.82 J Z	0.69 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	17 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	0.89 J Z	1.7 U	0.88 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	2.3	3.1	1.7 U	3	3.6	1.5 J Z	1.7 U	2.1	2.2
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.2 J Z	2.4	1.7 U	2.6	12	1.5 J Z	1.7 U	2.7	1.9
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.2 J Z	1.7 U	0.93 J Z	1.0 J Z	1.7 U	1.7 U	0.79 J Z	0.71 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	0.40 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.4 J Z	2.4	1.7 U	2.3	4.2	1.3 J Z	1.7 U	2.3	2.2
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	0.67 J Z	1.3 J Z	1.7 U	1.1 J Z	0.68 J Z	1.7 U	1.7 U	1.0 J Z	0.77 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	0.91 J Z	1.7 U	0.88 J Z	0.78 J Z	1.7 U	1.7 U	1.1 J Z	0.74 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	0.93 J Z	1.3 J Z	1.7 U	2.2	6.9	0.88 J Z	1.7 U	1.3 J Z	0.90 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	18 U	18 U	6.9 J Z	18 U	18 U	19 U	18 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U F	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	0.70 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-6.5-7.5	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	06/05/2013	05/31/2013	05/30/2013	05/30/2013	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013
			SDG	PH047	PH044	PH043	PH043	PH058	PH058	PH058	PH058	PH055
			Start Depth	4	0	0	6.5	0	0	0	0	0
			End Depth	5	0.5	0.5	7.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	19 U	20 U	18 U	18 U	18 U	18 U	140
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	19 U	20 U	170	200	230	18 U	51
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	0.97 J Z	1.7 U	1.9 U	1.9	1.1 J Z	2.4	1.9	0.90 J Z
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	19 U	20 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	0.71 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	18 U	19 U	17 U	17 U	17 U	17 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.6 J Z	1.7 U	1.9 U	7.6	4.3	6.1	2.8	3.4
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.3 J Z	1.7 U	1.9 U	2	1.3 J Z	3.2	1.8	0.99 J Z
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	0.91 J Z	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.6 J Z	0.71 J Z	1.9 U	2.7	2	2.3	1.7	1.2 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	0.95 J Z	1.7 U	1.1 J Z	0.97 J Z	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	0.81 J Z	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	19 U	20 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	19 U	20 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.3 J Z	1.7 U	1.9 U	1.1 J Z	1.3 J Z	1.4 J Z	0.75 J Z	0.73 J Z
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	19 U	20 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.8 U	0.73 J Z	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.5 J Z	1.7 U	1.9 U	1.7 U F	1.2 J Z	0.89 J Z	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.1 J Z	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0	SL-826-SA5A-SB-14.0-15.0	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	06/12/2013	06/12/2013	06/12/2013	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013
			SDG	PH055	PH055	PH055	PH051	PH041	PH041	PH041	PH042	PH042
			Start Depth	4	9	14	0	0	0	2.75	0	4.5
			End Depth	5	10	15	0.5	0.5	0.5	3.75	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	9.1 J Z	10 J Z	7.5 J Z	7.1 J Z	6.7 J Z	9.8 J Z	9.2 J Z	18 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	8.9 J Z	19 U	19 U	28 J Q	18 U	18 U	19 U	18 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.3 J Z	1.7	2.8	1.7 U	1.8	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	20 U	19 U	19 U	18 U	18 U	18 U	19 U	18 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	0.77 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	19 U	18 U	18 U	17 UJ Q	17 U	17 U	18 U	17 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	2.3	1.8 U	1.5 J Z	2	1.5 J Z	0.69 J Z	1.5 J Z	1.7 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.5 J Z	2.5	2.5	1.0 J Z	2	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	0.72 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	0.63 J Z	1.8 U	1.8	2.5	2	1.0 J Z	1.8	1.7 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	0.88 J Z	0.69 J Z	1.7 U	0.71 J Z	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	0.72 J Z	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	7.0 J Z	19 U	19 U	18 UJ Q	18 U	18 U	19 UJ Q	18 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	20 U	19 U	19 U	18 U	18 U	18 U	19 U	18 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.8 U	1.8 U	1.2 J Z	1.8	3.6	0.94 J Z	1.9	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	20 U	19 U	19 U	18 U	18 U	18 U	19 U	18 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.8 U	1.8 U	0.75 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	2.1	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U F	2.3	1.4 J Z	0.93 J Z	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.8 U	1.8 U	1.8 U	1.7 U	0.89 J Z	0.80 J Z	1.7 U	1.7 U	1.7 U

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				Sample Name	SL-832-SA5A-SB-0.0-0.5	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5
				Sample Type	N	N	N	N	N	N	N	N	N
				Sample Date	05/29/2013	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
				SDG	PH042	PH042	PH042	PH043	PH043	PH043	PH043	PH043	PH043
				Start Depth	0	4	7.2	0	2.5	0	2.4	0	2.5
				End Depth	0.5	5	8.2	0.5	3.5	0.5	3.4	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit										
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	129-00-0	Pyrene	µg/kg	0.94 J Z	1.7 U	1.7 U	1.1 J Z	1.7 U	1.7 U	1.7 U	0.97 J Z	2.7	
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.3 J Z	
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	18 U	17 U	18 U	17 U	18 U	20 U	18 U	
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	0.92 J Z	
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	0.77 J Z	1.7 U	1.7 U	1.2 J Z	1.7 U	0.76 J Z	1.7 U	1.5 J Z	3	
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.3 J Z	1.7 U	1.7 U	1.2 J Z	1.7 U	1.7 U	1.7 U	1.2 J Z	2.8	
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	0.73 J Z	
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	218-01-9	Chrysene	µg/kg	1.2 J Z	0.46 J Z	1.7 U	1.2 J Z	1.7 U	0.91 J Z	1.7 U	1.8 J Z	3.2	
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	0.73 J Z	1.7 U	1.7 U	1.7 U	1.9 U	1.2 J Z	
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.4 J Z	
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.0 J Z	1.7 U	1.7 U	0.74 J Z	1.7 U	1.7 U	1.7 U	1.0 J Z	1.7	
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	19 U	18 U	19 U	18 U	19 U	21 U	19 U	
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.94 J Z	0.88 J Z	
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	1.7 U	

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			Sample Name	SL-837-SA5A-SB-0.0-0.5	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5	SL-842-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	FD	N	N	N	N	N
			Sample Date	05/30/2013	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/29/2013
			SDG	PH043	PH043	PH043	PH044	PH044	PH044	PH044	PH044	PH042
			Start Depth	0	4.5	4.5	0	0	0	0	0	0
			End Depth	0.5	5.5	5.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 UJ FD	31 J FD, Q	19 U	19 U	19 U	16 J Z	19 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	20 U	19 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	0.39 J Z	1.7 U	0.47 J Z
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	4.1	1.7 U	5.5
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	20 U	19 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 J Z	1.7 U	0.79 J Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	18 U	19 U	18 U	18 U	18 U	19 U	18 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.4 J Z	1.7 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	0.96 J FD, Z	1.7 UJ FD	1.2 J Z	5.7	1.7 U	2.6
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	0.70 J FD, Z	1.7 UJ FD	1.8 U	5.1	1.7 U	3.9
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9	1.7 U	1.1 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.7 U	0.58 J FD, Z	1.8 UJ FD	1.4 J FD, Z	0.48 J FD, Z	1.2 J Z	5.7	1.7 U	4.4
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	2.4	1.7 U	0.90 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	2.1	1.7 U	0.83 J Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	20 U	19 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	20 U	19 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.8 U	1.8 U	1.2 J FD, Z	1.7 UJ FD	1.8 U	2.7	1.7 U	3.5
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	20 U	19 U	19 U	19 U	20 U	19 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.1 J Z	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.4 J Z	1.1 J Z	1.6 J Z	2.4	1.1 J Z	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.8 U	1.8 U	1.1 J Z	0.79 J Z	1.3 J Z	1.8 J Z	0.77 J Z	1.7 U

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			Sample Name	SL-844-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	FD	N
			Sample Date	05/29/2013	06/07/2013	06/07/2013	06/07/2013	07/29/2013	06/14/2013	07/29/2013	06/14/2013	06/14/2013
			SDG	PH042	PH051	PH051	PH051	PH077	PH057	PH077	PH057	PH057
			Start Depth	0	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	18 U	19 U	18 U	160	18 U	7.9 J Z	6.1 J Z	11 J Z	18 U F
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	120	13 J Z	18 U	18 U	8.9 J Z	18 U	18 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.7 U	1.7 U	1.2 J Z	6.8	1.7 U	1.7 U	1.4 J Z	1.1 J FD, Z	2.6 J FD
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.7 U	1.7 U	1.7 U	0.88 J Z	1.7 U	1.7 U	0.74 J Z	1.7 UJ FD	0.72 J FD, Z
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	17 U	18 U	17 U	17 U	17 U	17 U	17 U	17 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ FD	0.80 J FD, Z
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.7 U	1.7 U	0.84 J Z	2.1	1.7 U	2.3	1.4 J Z	2.4	3.4
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.7 U	1.7 U	1.3 J Z	2.2	1.7 U	1.7 U	1.6 J Z	1.2 J FD, Z	3.1 J FD
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.74 J Z	1.0 J Z
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	0.48 J Z	0.75 J Z	1.4 J Z	69	1.7 U	1.7 U	1.5 J Z	1.0 J FD, Z	2.4 J FD
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.7 U	1.7 U	1.7 U	0.87 J Z	1.7 U	1.7 U	1.7 U	0.78 J FD, Z	1.4 J FD, Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.7 U	0.71 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ FD	1.2 J FD, Z
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	18 U	18 U	18 U	18 U	18 U	18 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.7 U	1.7 U	0.83 J Z	1.7	1.7 U	1.7 U	1.0 J Z	0.67 J FD, Z	1.8 J FD
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	18 U	18 U	18 U	18 U	18 U	6.2 J FD, Z	18 UJ FD
8270D SIM	86-73-7	Fluorene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U

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			Sample Name	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5	SL-858-SA5A-SB-0.0-0.5	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	06/14/2013	07/29/2013	07/29/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013	06/19/2013	06/18/2013
			SDG	PH057	PH077	PH077	PH059	PH059	PH059	PH047	PH060	PH059
			Start Depth	4.5	0	3.5	0	4	0	0	0	0
			End Depth	5.5	0.5	4.5	0.5	5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	16 J Z	28 U	19 U	19 U	19 U	7.0 J Z	190 U	180 U	18 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	28 U	19 U	140	19 U	170	190 U	180 U	98
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	0.44 J Z	5.9 J Z	3.8 J Z	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.3 J Z	1.8 U	1.5 J Z	1.7 U	2.9	54	84	1.7
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	28 U	19 U	19 U	19 U	18 U	190 U	180 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	0.77 J Z	14 J Z	7.6 J Z	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	26 U	18 U	17 U	18 U	17 U	180 U	170 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	0.71 J Z	9.5 J Z	17 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	1.8 U	1.3 J Z	1.8 U	3.3	1.7 U	5.4	40	26	5.4
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.6 J Z	1.8 U	1.8	1.7 U	3.4	74	110	2
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.4 J Z	16 J Z	7.9 J Z	4.3
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.6 J Z	1.8 U	1.5 J Z	1.7 U	3.7	51	35	1.6 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.4 J Z	17 J Z	17 U	0.85 J Z
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	0.86 J Z	17 J Z	17 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	28 U	19 U	19 U	19 U	18 U	190 U	180 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	28 U	19 U	19 U	19 U	18 U	190 U	180 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.1 J Z	1.8 U	1.0 J Z	1.7 U	1.8	35	80	1.9
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	28 U	19 U	19 U	19 U	18 U	190 U	180 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.2 J Z	2.6 U	1.8 U	1.7 U	1.7 U	1.7 U	18 U	17 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	2.6 U	1.8 U	0.96 J Z	1.7 U	1.4 J Z	18 U	17 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	0.74 J Z	2.6 U	1.8 U	1.7 U	1.7 U	1.2 J Z	18 U	17 U	1.7 U

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		Sample Name	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0	SL-862-SA5A-SB-0.0-0.5	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0
		Sample Type	N	N	N	N	N	N	N	N	N
		Sample Date	06/18/2013	06/18/2013	06/05/2013	06/05/2013	06/05/2013	06/06/2013	06/06/2013	06/19/2013	06/19/2013
		SDG	PH059	PH059	PH047	PH047	PH047	PH050	PH050	PH060	PH060
		Start Depth	4	10.5	0	4	7	0	4.5	0	4
		End Depth	5	11.5	0.5	5	8	0.5	5.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	120-12-7	Anthracene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	1.8 U	1.7 U	31	1.8 U	1.9 U	11 J Z	1.7 U	22	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18 U	17 U	180 U	19 U	19 U	170 U	17 U	180 U	18 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	0.97 J Z	1.7 U	26	1.8 U	1.9 U	12 J Z	1.7 U	22	1.5 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	1.8 U	1.7 U	45	1.8 U	1.9 U	12 J Z	1.7 U	24	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	1.8 U	1.7 U	8.9 J Z	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	1.8 U	1.7 U	37	1.8 U	1.9 U	13 J Z	1.7 U	21	0.55 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	1.8 U	1.7 U	7.6 J Z	1.8 U	1.9 U	17 U	1.7 U	7.5 J Z	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	1.8 U	1.7 U	8.5 J Z	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	1.8 U	1.7 U	16 J Z	1.8 U	1.9 U	17 U	1.7 U	18	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	19 U	19 U	190 U	20 U	20 U	180 U	19 U	190 U	19 U
8270D SIM	86-73-7	Fluorene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	0.93 J Z	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	1.8 U	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	1.1 J Z	1.7 U	17 U	1.8 U	1.9 U	17 U	1.7 U	17 U	1.7 U

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			Sample Name	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-9.0-10.0	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5	SL-867-SA5A-SB-3.5-4.5
			Sample Type	N	N	N	N	N	N	N	N	N
			Sample Date	06/18/2013	06/18/2013	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/20/2013	06/20/2013
			SDG	PH059	PH059	PH060	PH060	PH060	PH060	PH060	PH061	PH061
			Start Depth	0	4	0	4	9	0	5.5	0	3.5
			End Depth	0.5	5	0.5	5	10	0.5	6.5	0.5	4.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	38	19 U	180 U	19 U	19 U	430	47	180 U	6.4 J Z
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	18 U	19 U	160 J Z	19 U	19 U	180 U	19 U	180 U	18 U
8270D SIM	120-12-7	Anthracene	µg/kg	18	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	129-00-0	Pyrene	µg/kg	100	0.82 J Z	47	1.7 U	1.8 U	15 J Z	1.7 U	11 J Z	1.7 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	18 U	19 U	180 U	19 U	19 U	180 U	19 U	180 U	18 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	9.3	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	18	18 U	170 U	17 U	18 U	170 U	18 U	170 U	17 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	9.1	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	27	1.8 U	20	2.7	1.8 U	7.6 J Z	1.2 J Z	17 U	1.0 J Z
8270D SIM	206-44-0	Fluoranthene	µg/kg	99	0.72 J Z	66	0.74 J Z	1.8 U	20	1.7 U	14 J Z	1.7 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	17	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	0.60 J Z	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	218-01-9	Chrysene	µg/kg	49	0.42 J Z	25	1.4 J Z	1.8 U	10 J Z	0.73 J Z	4.9 J Z	0.35 J Z
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	26	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	3.3	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	36	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	1.7 U	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	7.7	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	18 U	19 U	180 U	19 U	19 U	180 U	19 U	180 U	18 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	18 U	19 U	180 U	19 U	19 U	180 U	19 U	180 U	18 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	85	1.8 U	49	1.7 U	1.8 U	14 J Z	1.7 U	7.7 J Z	1.7 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	18 U	19 U	180 U	19 U	19 U	180 U	19 U	180 U	18 U
8270D SIM	86-73-7	Fluorene	µg/kg	5.8	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	1.4 J Z	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	91-20-3	Naphthalene	µg/kg	2.8	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	2.3	1.8 U	17 U	1.7 U	1.8 U	17 U	1.7 U	17 U	1.7 U

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			Sample Name	SL-868-SA5A-SB-0.0-0.5	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5	SL-870-SA5A-SB-0.0-0.5	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N	N
			Sample Date	06/20/2013	06/20/2013	06/14/2013	06/14/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013
			SDG	PH061	PH061	PH057	PH057	PH050	PH050	PH050	PH050	PH050
			Start Depth	0	4	0	0	0	0	0	2.5	0
			End Depth	0.5	5	0.5	0.5	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8270D SIM	110-91-8	Morpholine	µg/kg	--	--	--	--	--	--	--	--	--
8270D SIM	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	180 U	19 U	7.3 J Z	6.5 J Z	18 U	18 U	18 U	19 U	20 U
8270D SIM	117-84-0	Di-n-octylphthalate	µg/kg	180 U	19 U	58	16 J Z	100 J FD	46 J FD, Q	18 U	19 U	7.5 J Z
8270D SIM	120-12-7	Anthracene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	129-00-0	Pyrene	µg/kg	10 J Z	0.85 J Z	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	131-11-3	Dimethylphthalate	µg/kg	180 U	19 U	18 U	18 U	18 U	18 U	18 U	19 U	20 U
8270D SIM	191-24-2	Benzo(g,h,i)perylene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	192-97-2	Benzo(e)pyrene	µg/kg	170 U	18 U	17 U	17 U	17 U	17 U	17 U	18 U	19 U
8270D SIM	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	205-99-2	Benzo(b)fluoranthene	µg/kg	17 U	1.3 J Z	0.70 J Z	1.5 J Z	0.71 J FD, Z	1.7 UJ FD	1.7 U	1.8 U	1.8 U
8270D SIM	206-44-0	Fluoranthene	µg/kg	12 J Z	1.1 J Z	1.7 U	0.78 J Z	0.81 J FD, Z	1.7 UJ FD	1.7 U	1.8 U	1.8 U
8270D SIM	207-08-9	Benzo(k)fluoranthene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	208-96-8	Acenaphthylene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	218-01-9	Chrysene	µg/kg	5.9 J Z	0.73 J Z	1.7 U	0.74 J Z	0.80 J FD, Z	1.7 UJ FD	1.7 U	1.8 U	1.8 U
8270D SIM	50-32-8	Benzo(a)pyrene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	53-70-3	Dibenzo(a,h)anthracene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	56-55-3	Benzo(a)anthracene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	62-75-9	N-Nitrosodimethylamine	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	83-32-9	Acenaphthene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	84-66-2	Diethylphthalate	µg/kg	180 U	19 U	18 U	18 U	18 U	18 UJ Q	18 U	19 U	20 U
8270D SIM	84-74-2	Di-n-butylphthalate	µg/kg	180 U	19 U	18 U	18 U	18 U	18 U	18 U	19 U	20 U
8270D SIM	85-01-8	Phenanthrene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.84 J Z	1.8 U
8270D SIM	85-68-7	Butylbenzylphthalate	µg/kg	180 U	19 U	18 U	18 U	18 U	18 U	18 U	19 U	20 U
8270D SIM	86-73-7	Fluorene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	90-12-0	1-Methylnaphthalene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	91-20-3	Naphthalene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U
8270D SIM	91-57-6	2-Methylnaphthalene	µg/kg	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.8 U

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				Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
				SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
				Start Depth	0	4	9	17	21	33	0	7
				End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	8.0 J L, Z	18 U	18 U	19 U	19 U	9.4 J Z	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	35 U	36 U	36 U	37 U	37 U	35 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	35 U	36 U	36 U	37 U	37 U	35 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	19 U	19 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	35 U	36 U	36 U	37 U	37 U	35 U	37 U

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				Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-584-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	FD	N	N
				Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/25/2013
				SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129	PH134
				Start Depth	10	15	0	9	11	11	14	0
				End Depth	11	16	0.5	10	12	12	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	37 U	38 U	29 J Z	36 U	36 U	36 U	36 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	37 U	38 U	35 U	36 U	36 U	36 U	36 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	19 U	18 U	19 U	18 U	19 U	19 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	37 U	38 U	35 U	36 U	36 U	36 U	36 U	34 U

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				Sample Name	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-630A-SA5A-SB-0.0-0.5	SL-630B-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/11/2013	11/11/2013
				SDG	PH132	PH132	PH136	PH126	PH126	PH126	PH125	PH125
				Start Depth	0	4	0	0	0	6.5	0	0
				End Depth	0.5	5	0.5	0.5	0.5	7.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	23 J FD	120 J FD	18 U	17 U	17 U	
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	36 U	34 U	33 U	34 U	36 U	28 J Z	33 U	
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	36 U	34 U	33 U	34 U	36 U	33 U	33 U	
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	17 U	17 U	18 U	17 U	17 U	
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	36 U	34 U	33 U	34 U	36 U	33 U	33 U	

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				Sample Name	SL-630C-SA5A-SB-0.0-0.5	SL-630D-SA5A-SB-0.0-0.5	SL-631-SA5A-SB-0.0-0.5	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	11/11/2013	11/11/2013	11/25/2013	11/11/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
				SDG	PH125	PH125	PH134	PH125	PH128	PH128	PH128	PH128
				Start Depth	0	0	0	0	0	3	3	0
				End Depth	0.5	0.5	0.5	0.5	0.5	4	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	33 U	33 U	14 J Z	33 U	34 U	34 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	33 U	33 U	34 U	33 U	34 U	34 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	17 U	17 U	17 U	17 U	18 U	18 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	33 U	33 U	34 U	33 U	34 U	34 U	34 U	34 U

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				Sample Name	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
				SDG	PH128	PH128	PH128	PH128	PH128	PH128	PH128	PH128
				Start Depth	4	7	0	4	7	0	3	0
				End Depth	5	8	0.5	5	8	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	35 U	34 U	37 U	36 U	34 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	35 U	34 U	37 U	36 U	34 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	17 U	19 U	19 U	18 U	18 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	35 U	34 U	37 U	36 U	34 U	34 U	34 U

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				Sample Name	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	FD
				Sample Date	11/22/2013	11/22/2013	11/22/2013	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013
				SDG	PH133	PH133	PH133	PH133	PH133	PH136	PH133	PH133
				Start Depth	0	4	10.5	0	4	0	0	0
				End Depth	0.5	5	11.5	0.5	5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	16 J Z	35 U	37 U	34 U	36 U	18 J Z	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	33 U	35 U	37 U	34 U	36 U	34 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	18 U	19 U	18 U	19 U	17 U	17 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	33 U	35 U	37 U	34 U	36 U	34 U	34 U	34 U

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				Sample Name	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0
				Sample Type	N	N	FD	N	N	N	FD	N
				Sample Date	11/18/2013	11/18/2013	11/19/2013	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013
				SDG	PH131	PH131	PH132	PH132	PH132	PH131	PH131	PH131
				Start Depth	0	4	0	0	4	0	4	4
				End Depth	0.5	5	0.5	0.5	5	0.5	5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	16 J FD, Z	34 UJ FD	35 U	34 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 U	33 U	34 U	35 U	34 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	17 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	33 U	34 U	35 U	34 U	34 U	34 U

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				Sample Name	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013
				SDG	PH131	PH131	PH135	PH135	PH134	PH134	PH134	PH135
				Start Depth	8	0	0	2.5	0	0	6	0
				End Depth	9	0.5	0.5	3.5	0.5	0.5	7	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	34 U	35 U	34 U	34 U	34 U	34 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 U	34 U	35 U	34 U	34 U	34 U	34 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	18 U	18 U	17 U	17 U	18 U	18 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	34 U	35 U	34 U	34 U	34 U	34 U

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				Sample Name	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	11/26/2013	11/18/2013	11/26/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013
				SDG	PH135	PH131	PH135	PH132	PH131	PH131	PH131	PH131
				Start Depth	0	0	0	0	0	2.5	0	3
				End Depth	0.5	0.5	0.5	0.5	0.5	3.5	0.5	4
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	34 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	34 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	17 U	18 U	17 U	18 U	18 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	34 U	34 U	34 U	34 U	34 U	35 U	34 U	36 U

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				Sample Name	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5	SL-767-SA5A-SB-2.5-3.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N	N
				Sample Date	11/26/2013	11/26/2013	11/26/2013	11/26/2013	06/11/2013	06/11/2013	06/11/2013	06/11/2013
				SDG	PH135	PH135	PH135	PH135	PH054	PH054	PH054	PH054
				Start Depth	0	3	0	2.5	0	0	0	0
				End Depth	0.5	4	0.5	3.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	45	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	36 U	34 U	34 U	34 U	34 U	34 U	33 U	33 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	36 U	34 U	34 U	34 U	34 U	34 U	33 U	33 U
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	18 U	18 U	18 U	18 U	18 U	17 U	17 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	36 U	34 U	34 U	34 U	34 U	34 U	33 U	33 U

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				Sample Name	SL-789-SA5A-SB-5.0-6.0	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	FD	N
				Sample Date	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/05/2013	06/05/2013	06/14/2013	06/14/2013
				SDG	PH054	PH056	PH056	PH056	PH047	PH047	PH057	PH057
				Start Depth	5	0	0	0	0	5.5	0	0
				End Depth	6	0.5	0.5	0.5	0.5	6.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8082A	11096-82-5	Aroclor 1260	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	11097-69-1	Aroclor 1254	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	11100-14-4	Aroclor 1268	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	11104-28-2	Aroclor 1221	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	11126-42-4	Aroclor 5460	µg/kg	35 U	34 U	33 U	34 U	33 U	35 U	33 U	33 U
8082A	11141-16-5	Aroclor 1232	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	12642-23-8	Aroclor 5442	µg/kg	35 U	34 U	33 U	34 U	33 U	35 U	33 UJ C	33 UJ C
8082A	12672-29-6	Aroclor 1248	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	12674-11-2	Aroclor 1016	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	37324-23-5	Aroclor 1262	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	53469-21-9	Aroclor 1242	µg/kg	18 U	17 U	17 U	17 U	17 U	18 U	17 U	17 U
8082A	63496-31-1	Aroclor 5432	µg/kg	35 U	34 U	33 U	34 U	33 U	35 U	33 U	33 U

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			Sample Name	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N
			Sample Date	06/14/2013	07/29/2013	07/29/2013	06/05/2013	06/05/2013	06/05/2013
			SDG	PH057	PH077	PH077	PH047	PH047	PH047
			Start Depth	4.5	0	3.5	0	4	7
			End Depth	5.5	0.5	4.5	0.5	5	8
Analytic Method	CAS Number	Chemical Name	Unit						
8082A	11096-82-5	Aroclor 1260	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	11097-69-1	Aroclor 1254	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	11100-14-4	Aroclor 1268	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	11104-28-2	Aroclor 1221	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	11126-42-4	Aroclor 5460	µg/kg	36 U	33 U	35 U	34 U	36 U	37 U
8082A	11141-16-5	Aroclor 1232	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	12642-23-8	Aroclor 5442	µg/kg	36 U	33 U	35 U	34 U	36 U	37 U
8082A	12672-29-6	Aroclor 1248	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	12674-11-2	Aroclor 1016	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	37324-23-5	Aroclor 1262	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	53469-21-9	Aroclor 1242	µg/kg	19 U	17 U	18 U	18 U	19 U	19 U
8082A	63496-31-1	Aroclor 5432	µg/kg	36 U	33 U	35 U	34 U	36 U	37 U

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			Sample Name	SL-1178-SA5A-SB-0.0-0.5	SL-778-SA5A-SB-0.0-0.5	SL-778-SA5A-SB-4.0-5.0
			Sample Type	FD	N	N
			Sample Date	06/12/2013	06/12/2013	06/12/2013
			SDG	PH055	PH055	PH055
			Start Depth	0	0	4
			End Depth	0.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit			
6850	14797-73-0	Perchlorate	µg/kg	5.2 U	5.1 U	5.3 U

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		Sample Name	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-1008-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5
		Sample Type	N	FD	FD	N	N	N	FD	N
		Sample Date	11/22/2013	11/22/2013	11/19/2013	11/19/2013	11/19/2013	06/10/2013	06/10/2013	06/10/2013
		SDG	PH133	PH133	PH132	PH132	PH132	PH052	PH052	PH052
		Start Depth	0	0	0	0	4	0	0	0
		End Depth	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit							
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.7 U	1.8 U	0.46 J FD, Z	1.8 UJ FD	1.8 U	1.7 U	1.8 U	1.7 U
8081B	2385-85-5	Mirex	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U
8081B	309-00-2	Aldrin	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	319-85-7	Beta-Bhc	µg/kg	1.9 UJ FD	1.6 J FD, Z	1.9 U	2.0 U	2.0 U	1.9 U	2.0 U	1.9 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U
8081B	50-29-3	4,4'-DDT	µg/kg	1.7 UJ FD	6.7 J FD	52 J FD	11 J FD, Q	1.8 U	1.2 J Z	1.8 U	1.7 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.8 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U	1.8 U
8081B	57-74-9	Chlordane	µg/kg	17 U	18 U	17 U	18 U	18 U	17 U	18 U	17 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	60-57-1	Dieldrin	µg/kg	1.7 UJ FD	0.37 J FD, Z	1.5 J FD, Z	1.8 UJ FD	1.8 U	1.7 U	1.8 U	1.7 U
8081B	72-20-8	Endrin	µg/kg	1.7 U	1.8 U	6.2 U	1.8 U	1.8 U	1.7 U	1.8 U	1.7 U
8081B	72-43-5	Methoxychlor	µg/kg	6.8 U	6.9 U	6.8 U	6.9 U	7.0 U	6.8 U	7.0 U	6.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.7 UJ FD	3.2 J FD	1.1 J FD, Z	1.8 UJ FD	1.8 U	1.7 U	1.8 U	1.7 U
8081B	72-55-9	4,4'-DDE	µg/kg	1.7 UJ FD	1.5 J FD, Z	87 J FD	8.0 J FD, Q	1.8 U	1.7 U	1.8 U	1.7 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	0.49 J Z	1.8 U	1.7 U
8081B	76-44-8	Heptachlor	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	33 U	34 U	33 U	34 U	35 U	34 U	34 U	34 U
8081B	959-98-8	Endosulfan I	µg/kg	0.84 U	0.86 U	0.84 U	0.86 U	0.87 U	0.84 U	0.87 U	0.85 U

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			Sample Name	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5	SL-779-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N
			Sample Date	06/10/2013	06/10/2013	06/10/2013	06/10/2013	06/10/2013
			SDG	PH052	PH052	PH052	PH053	PH053
			Start Depth	0	6	6	0	0
			End Depth	0.5	7	7	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit					
8081B	1024-57-3	Heptachlor Epoxide	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	1031-07-8	Endosulfan Sulfate	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	2385-85-5	Mirex	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	309-00-2	Aldrin	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	319-84-6	Alpha-Bhc	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	319-85-7	Beta-Bhc	µg/kg	1.9 U	2.0 U	2.0 U	2.0 U	1.9 U
8081B	319-86-8	Delta-Bhc	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	33213-65-9	Endosulfan II	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	50-29-3	4,4'-DDT	µg/kg	0.82 J Z	1.8 U	1.8 U	1.7 U	1.7 U
8081B	53494-70-5	Endrin Ketone	µg/kg	1.8 U	1.9 U	1.9 U	1.9 U	1.8 U
8081B	57-74-9	Chlordane	µg/kg	17 U	18 U	18 U	17 U	17 U
8081B	58-89-9	Gamma-Bhc (Lindane)	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	60-57-1	Dieldrin	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	72-20-8	Endrin	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	72-43-5	Methoxychlor	µg/kg	6.8 U	7.2 U	7.2 U	6.9 U	6.8 U
8081B	72-54-8	4,4'-DDD	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	72-55-9	4,4'-DDE	µg/kg	0.52 J Z	1.8 U	1.8 U	1.7 U	1.7 U
8081B	7421-93-4	Endrin Aldehyde	µg/kg	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
8081B	76-44-8	Heptachlor	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U
8081B	8001-35-2	Technical Toxaphene	µg/kg	33 U	35 U	35 U	34 U	34 U
8081B	959-98-8	Endosulfan I	µg/kg	0.84 U	0.89 U	0.89 U	0.85 U	0.85 U

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			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7
			End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.73	7.39	7.4	7.71	8.05	8.16	7.11	6.87

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			Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-584-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/25/2013
			SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129	PH134
			Start Depth	10	15	0	9	11	11	14	0
			End Depth	11	16	0.5	10	12	12	15	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.02	6.48	8.25	8.17	7.86	6.89	7.63	6.89

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			Sample Name	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-631-SA5A-SB-0.0-0.5	SL-634-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/25/2013	11/11/2013
			SDG	PH132	PH132	PH136	PH126	PH126	PH126	PH134	PH125
			Start Depth	0	4	0	0	0	6.5	0	0
			End Depth	0.5	5	0.5	0.5	0.5	7.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.32	6.27	6.49	8.25	7.76	7.9	6.94	7.34

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			Sample Name	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5	SL-658-SA5A-SB-4.0-5.0
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH128	PH128	PH128
			Start Depth	0	3	3	0	4	7	0	4
			End Depth	0.5	4	4	0.5	5	8	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.5	8.18	7.92	6.81	7.53	7.69	6.76	7.39

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			Sample Name	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5	SL-676-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/22/2013	11/22/2013	11/22/2013	11/22/2013
			SDG	PH128	PH128	PH128	PH128	PH133	PH133	PH133	PH133
			Start Depth	7	0	3	0	0	4	10.5	0
			End Depth	8	0.5	4	0.5	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.45	5.87	7.55	8.14	7.52	7.75	7.5	6.89

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			Sample Name	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	FD	N
			Sample Date	11/22/2013	12/02/2013	11/22/2013	11/22/2013	11/18/2013	11/18/2013	11/19/2013	11/19/2013
			SDG	PH133	PH136	PH133	PH133	PH131	PH131	PH132	PH132
			Start Depth	4	0	0	0	0	4	0	0
			End Depth	5	0.5	0.5	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.15	6.95	7.09	6.62	6.32	6.77	6.75	6.81

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			Sample Name	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-2.5-3.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013
			SDG	PH132	PH131	PH131	PH131	PH131	PH131	PH135	PH135
			Start Depth	4	0	4	4	8	0	0	2.5
			End Depth	5	0.5	5	5	9	0.5	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.99	6.5	6.68	6.63	7.16	6.69	6.44	6.48

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			Sample Name	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5	SL-732-SA5A-SB-0.0-0.5
			Sample Type	FD	N	N	N	N	N	N	N
			Sample Date	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/18/2013	11/26/2013	11/19/2013
			SDG	PH134	PH134	PH134	PH135	PH135	PH131	PH135	PH132
			Start Depth	0	0	6	0	0	0	0	0
			End Depth	0.5	0.5	7	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.93	7.04	7.11	10.3	8.81	6.64	6.51	6.76

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			Sample Name	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5	SL-767-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/26/2013	11/26/2013
			SDG	PH131	PH131	PH131	PH131	PH135	PH135	PH135	PH135
			Start Depth	0	2.5	0	3	0	3	0	2.5
			End Depth	0.5	3.5	0.5	4	0.5	4	0.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.24	7.08	6.52	6.78	6.85	7.11	7.15	6.78

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			Sample Name	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0
			Sample Type	N	N	FD	N	N	N	FD	N
			Sample Date	06/04/2013	06/10/2013	06/10/2013	06/10/2013	06/13/2013	06/10/2013	06/10/2013	06/10/2013
			SDG	PH047	PH052	PH052	PH052	PH056	PH052	PH052	PH052
			Start Depth	0	0	0	0	0	0	6	6
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	7	7
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.2	6.68	6.62	6.33	6.65	6.04	8.42	7.86

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			Sample Name	SL-777-SA5A-SB-0.0-0.5	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0	SL-782-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	06/10/2013	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH053	PH053	PH058	PH058	PH058	PH055	PH055	PH055
			Start Depth	0	0	0	3	3	0	2	0
			End Depth	0.5	0.5	0.5	4	4	0.5	3	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.65	6.84	4.55	6.78	6.93	6.37	6.85	6.62

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			Sample Name	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5	SL-787-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N	N	N
			Sample Date	06/12/2013	06/11/2013	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/11/2013
			SDG	PH055	PH054	PH054	PH055	PH055	PH054	PH054	PH054
			Start Depth	4.5	0	0	0	2.5	0	0	0
			End Depth	5.5	0.5	0.5	0.5	3.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.63	7.68	6.88	7.14	7.15	6.22	6.47	6.5

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			Sample Name	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5	SL-795-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/11/2013	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013
			SDG	PH054	PH054	PH054	PH056	PH056	PH056	PH056	PH056
			Start Depth	0	0	5	0	0	0	0	0
			End Depth	0.5	0.5	6	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.98	6.55	7.32	6.25	6.32	6.55	6.36	6.55

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			Sample Name	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-6.5-7.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/05/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	05/31/2013	05/30/2013	05/30/2013
			SDG	PH047	PH047	PH047	PH047	PH047	PH044	PH043	PH043
			Start Depth	0	5.5	0	0	4	0	0	6.5
			End Depth	0.5	6.5	0.5	0.5	5	0.5	0.5	7.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.66	6.75	6.41	6.18	6.62	6.37	6.58	6.85

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			Sample Name	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0	SL-826-SA5A-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH058	PH058	PH058	PH058	PH055	PH055	PH055	PH055
			Start Depth	0	0	0	0	0	4	9	14
			End Depth	0.5	0.5	0.5	0.5	0.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.08	6.58	6.67	6.41	6.5	6.56	7.21	7.67

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			Sample Name	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5	SL-832-SA5A-SB-0.0-0.5	SL-832-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013	05/29/2013	05/29/2013
			SDG	PH051	PH041	PH041	PH041	PH042	PH042	PH042	PH042
			Start Depth	0	0	0	2.75	0	4.5	0	4
			End Depth	0.5	0.5	0.5	3.75	0.5	5.5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.3	6.29	6.32	6.97	6.28	6.91	6.46	6.75

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			Sample Name	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5	SL-837-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
			SDG	PH042	PH043	PH043	PH043	PH043	PH043	PH043	PH043
			Start Depth	7.199999809	0	2.5	0	2.400000095	0	2.5	0
			End Depth	8.199999809	0.5	3.5	0.5	3.400000095	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.24	6.46	6.89	6.15	6.95	6.13	6.66	6.27

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			Sample Name	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5	SL-842-SA5A-SB-0.0-0.5
			Sample Type	FD	N	FD	N	N	N	N	N
			Sample Date	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/31/2013	05/29/2013
			SDG	PH043	PH043	PH044	PH044	PH044	PH044	PH044	PH042
			Start Depth	4.5	4.5	0	0	0	0	0	0
			End Depth	5.5	5.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.93	6.83	5.24	5.45	6.25	6.68	6.61	6.45

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			Sample Name	SL-844-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5	SL-1252-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	FD
			Sample Date	05/29/2013	06/07/2013	06/07/2013	06/07/2013	07/29/2013	06/14/2013	07/29/2013	06/14/2013
			SDG	PH042	PH051	PH051	PH051	PH077	PH057	PH077	PH057
			Start Depth	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	7.14	6.31	6.63	6.22	6.29	6.73	6.18	6.03

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			Sample Name	SL-852-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5	SL-858-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/14/2013	06/14/2013	07/29/2013	07/29/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013
			SDG	PH057	PH057	PH077	PH077	PH059	PH059	PH059	PH047
			Start Depth	0	4.5	0	3.5	0	4	0	0
			End Depth	0.5	5.5	0.5	4.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.2	6.54	6.43	6.43	6.03	6.72	6.03	7.24

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(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0	SL-862-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/19/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013	06/05/2013	06/05/2013	06/06/2013
			SDG	PH060	PH059	PH059	PH059	PH047	PH047	PH047	PH050
			Start Depth	0	0	4	10.5	0	4	7	0
			End Depth	0.5	0.5	5	11.5	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.52	7.15	6.25	7.43	6.59	7.38	7.07	6.95

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			Sample Name	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/06/2013	06/19/2013	06/19/2013	06/18/2013	06/18/2013	06/19/2013	06/19/2013	06/19/2013
			SDG	PH050	PH060	PH060	PH059	PH059	PH060	PH060	PH060
			Start Depth	4.5	0	4	0	4	0	4	9
			End Depth	5.5	0.5	5	0.5	5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.74	5.31	6.47	6.61	6.38	7.04	6.82	7.64

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			Sample Name	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-0.0-0.5	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5	SL-870-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/19/2013	06/19/2013	06/20/2013	06/20/2013	06/20/2013	06/20/2013	06/14/2013	06/14/2013
			SDG	PH060	PH060	PH061	PH061	PH061	PH061	PH057	PH057
			Start Depth	0	5.5	0	3.5	0	4	0	0
			End Depth	0.5	6.5	0.5	4.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
9045M	pH	pH	pH	6.82	6.92	6.88	6.19	6.59	6.65	6.08	6.39

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R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
			Sample Type	FD	N	N	N	N
			Sample Date	06/06/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013
			SDG	PH050	PH050	PH050	PH050	PH050
			Start Depth	0	0	0	2.5	0
			End Depth	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit					
9045M	pH	pH	pH	6.62	6.45	6.67	6.29	6.23

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				Sample Name	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0
				Sample Type	FD	N	N
				Sample Date	11/25/2013	11/25/2013	11/25/2013
				SDG	PH134	PH134	PH134
				Start Depth	0	0	6
				End Depth	0.5	0.5	7
Analytic Method	CAS Number	Chemical Name	Unit				
8270D	100-01-6	4-Nitroaniline	µg/kg	170 U	170 U	170 U
8270D	100-02-7	4-Nitrophenol	µg/kg	510 U	510 U	520 U
8270D	100-51-6	Benzyl Alcohol	µg/kg	340 U	340 U	340 U
8270D	101-55-3	4-Bromophenyl-phenylether	µg/kg	34 U	34 U	34 U
8270D	105-67-9	2,4-Dimethylphenol	µg/kg	34 U	34 U	34 U
8270D	106-44-5	4-Methylphenol	µg/kg	34 U	34 U	34 U
8270D	106-46-7	1,4-Dichlorobenzene	µg/kg	34 U	34 U	34 U
8270D	106-47-8	4-Chloroaniline	µg/kg	34 U	34 U	34 U
8270D	108-68-9	3,5-Dimethylphenol	µg/kg	170 U	170 U	170 U
8270D	108-95-2	Phenol	µg/kg	34 U	34 U	34 U
8270D	110-86-1	Pyridine	µg/kg	170 U	170 U	170 U
8270D	111-44-4	bis(2-chloroethyl) ether	µg/kg	34 U	34 U	34 U
8270D	111-91-1	bis(2-chloroethoxy)methane	µg/kg	34 U	34 U	34 U
8270D	117-81-7	Bis(2-ethylhexyl)phthalate	µg/kg	170 U	170 U	180 U
8270D	117-84-0	Di-n-octylphthalate	µg/kg	170 U	170 U	170 U
8270D	118-74-1	Hexachlorobenzene	µg/kg	17 U	17 U	18 U
8270D	120-12-7	Anthracene	µg/kg	17 U	17 U	18 U
8270D	120-82-1	1,2,4-Trichlorobenzene	µg/kg	34 U	34 U	34 U
8270D	120-83-2	2,4-Dichlorophenol	µg/kg	34 U	34 U	34 U
8270D	122-66-7	1,2-Diphenylhydrazine	µg/kg	34 U	34 U	34 U
8270D	129-00-0	Pyrene	µg/kg	21 J FD	17 UJ FD	14 J Z
8270D	131-11-3	Dimethylphthalate	µg/kg	170 U	170 U	170 U
8270D	132-64-9	Dibenzofuran	µg/kg	34 U	34 U	34 U
8270D	191-24-2	Benzo(g,h,i)perylene	µg/kg	17 U	17 U	18 U
8270D	193-39-5	Indeno(1,2,3-cd)pyrene	µg/kg	17 U	17 U	18 U
8270D	205-99-2	Benzo(b)fluoranthene	µg/kg	16 J FD, Z	17 UJ FD	11 J Z
8270D	206-44-0	Fluoranthene	µg/kg	22 J FD	17 UJ FD	14 J Z
8270D	207-08-9	Benzo(k)fluoranthene	µg/kg	9 J FD, Z	17 UJ FD	8 J Z
8270D	208-96-8	Acenaphthylene	µg/kg	17 U	17 U	18 U
8270D	218-01-9	Chrysene	µg/kg	13 J FD, Z	17 UJ FD	11 J Z
8270D	39638-32-9	bis(2-chloroisopropyl) ether	µg/kg	34 U	34 U	34 U
8270D	50-32-8	Benzo(a)pyrene	µg/kg	13 J FD, Z	17 UJ FD	11 J Z
8270D	51-28-5	2,4-Dinitrophenol	µg/kg	670 U	670 U	680 U
8270D	534-52-1	4,6-Dinitro-2-methylphenol	µg/kg	510 U	510 U	520 U
8270D	53-70-3	Dibenzo(a,h)anthracene	µg/kg	17 U	17 U	18 U
8270D	541-73-1	1,3-Dichlorobenzene	µg/kg	34 U	34 U	34 U
8270D	56-55-3	Benzo(a)anthracene	µg/kg	9 J FD, Z	17 UJ FD	14 J Z
8270D	59-50-7	4-Chloro-3-methylphenol	µg/kg	34 U	34 U	34 U
8270D	621-64-7	N-Nitroso-di-n-propylamine	µg/kg	34 U	34 U	34 U
8270D	62-53-3	Aniline	µg/kg	340 U	340 U	340 U
8270D	62-75-9	N-Nitrosodimethylamine	µg/kg	170 U	170 U	170 U
8270D	65-85-0	Benzoic Acid	µg/kg	510 U	510 U	520 U
8270D	67-72-1	Hexachloroethane	µg/kg	170 U	170 U	170 U
8270D	7005-72-3	4-Chlorophenyl-phenylether	µg/kg	34 U	34 U	34 U
8270D	77-47-4	Hexachlorocyclopentadiene	µg/kg	510 U	510 U	520 U
8270D	78-59-1	Isophorone	µg/kg	34 U	34 U	34 U
8270D	83-32-9	Acenaphthene	µg/kg	17 U	17 U	18 U
8270D	84-66-2	Diethylphthalate	µg/kg	170 U	170 U	170 U
8270D	84-74-2	Di-n-butylphthalate	µg/kg	170 U	170 U	170 U
8270D	85-01-8	Phenanthrene	µg/kg	7 J FD, Z	17 UJ FD	4 J Z
8270D	85-68-7	Butylbenzylphthalate	µg/kg	170 U	170 U	170 U
8270D	86-30-6	N-Nitrosodiphenylamine	µg/kg	34 U	34 U	34 U
8270D	86-73-7	Fluorene	µg/kg	17 U	17 U	18 U
8270D	86-74-8	Carbazole	µg/kg	34 U	34 U	34 U
8270D	87-65-0	2,6-Dichlorophenol	µg/kg	34 U	34 U	34 U
8270D	87-68-3	Hexachlorobutadiene	µg/kg	34 U	34 U	34 U
8270D	87-86-5	Pentachlorophenol	µg/kg	170 U	170 U	180 U
8270D	88-06-2	2,4,6-Trichlorophenol	µg/kg	34 U	34 U	34 U
8270D	88-74-4	2-Nitroaniline	µg/kg	34 U	34 U	34 U
8270D	88-75-5	2-Nitrophenol	µg/kg	34 U	34 U	34 U
8270D	90-12-0	1-Methylnaphthalene	µg/kg	17 U	17 U	18 U
8270D	91-20-3	Naphthalene	µg/kg	17 U	17 U	18 U
8270D	91-57-6	2-Methylnaphthalene	µg/kg	17 U	17 U	18 U
8270D	91-58-7	2-Chloronaphthalene	µg/kg	34 U	33 U	34 U
8270D	91-94-1	3,3'-Dichlorobenzidine	µg/kg	340 U	340 U	340 U
8270D	92-52-4	1,1'-Biphenyl	µg/kg	34 U	34 U	34 U
8270D	92-87-5	Benzidine	µg/kg	1700 U	1700 R Q	1700 U
8270D	95-48-7	2-Methylphenol	µg/kg	34 U	34 U	34 U
8270D	95-50-1	1,2-Dichlorobenzene	µg/kg	34 U	34 U	34 U
8270D	95-57-8	2-Chlorophenol	µg/kg	34 U	34 U	34 U
8270D	95-95-4	2,4,5-Trichlorophenol	µg/kg	34 U	34 U	34 U
8270D	98-95-3	Nitrobenzene	µg/kg	34 U	34 U	34 U
8270D	99-09-2	3-Nitroaniline	µg/kg	170 U	170 U	170 U
8270D	NDPA122-39-4	Diphenylamine	µg/kg	170 U	170 U	170 U

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Definitions are provided at the beginning of Appendix A. The letters in

[part number] - [sub category] and there can be more than one letter.

			Sample Name	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5
			Sample Type	N	FD	N	N	N	N
			Sample Date	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013
			SDG	PH131	PH131	PH131	PH131	PH135	PH135
			Start Depth	0	4	4	8	0	0
			End Depth	0.5	5	5	9	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit						
8015B	84-15-1	o-Terphenyl	mg/kg	0.17 U	0.17 U	0.17 U	0.18 U	0.18 U	0.18 U
8015B	92-06-8	m-Terphenyl	mg/kg	0.17 U	0.12 J FD, Z	0.17 UJ FD	0.093 J Z	0.11 J Z	0.18 U
8015B	92-94-4	p-Terphenyl	mg/kg	0.17 U	0.17 U	0.17 U	0.18 U	0.18 U	0.18 U

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			Sample Name	SL-508-SA5A-SB-0.0-0.5	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-0.0-0.5	SL-518-SA5A-SB-7.0-8.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	0	4	9	17	21	33	0	7
			End Depth	0.5	5	10	18	22	34	0.5	8
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	27 U	270 U	5.5 U	5.5 U	5.6 U	5.7 U	5.2 U	5.5 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	27 U	270 U	5.5 U	5.5 U	5.6 U	5.7 U	5.2 U	4.4 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	110	700	5.5	5.8	5.6 U	4.3 J Z	4.9 J Z	16
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	240	2200	11	9.8 J Z	11 U	6.7 J Z	11	25
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	27 U	270 U	5.5 U	5.5 U	5.6 U	5.7 U	5.2 U	5.5 U

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			Sample Name	SL-518-SA5A-SB-10.0-11.0	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-0.0-0.5	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
			SDG	PH132	PH132	PH129	PH129	PH129	PH129	PH129
			Start Depth	10	15	0	9	11	11	14
			End Depth	11	16	0.5	10	12	12	15
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.7 U	5.4 U	5.6 U	5.5 U	5.6 U	5.6 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	4.6 J Z	5.7 U	5.4 U	4.6 J Z	5.5 U	5.6 U	5.6 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	11	5.7 U	5.4 U	14	5.7 J FD, Q	2.5 J FD, Z	7.9
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	21	11 U	11 U	22	12 J FD, Q	5.4 J FD, Z	15
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.7 U	5.4 U	5.6 U	5.5 U	5.6 U	5.6 U

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			Sample Name	SL-584-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-0.0-0.5	SL-596-SA5A-SB-4.0-5.0	SL-616-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-0.0-0.5	SL-928-SA5A-SB-0.0-0.5	SL-628-SA5A-SB-6.5-7.5	SL-631-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	FD	N	N
			Sample Date	11/25/2013	11/19/2013	11/19/2013	12/02/2013	11/12/2013	11/12/2013	11/12/2013	11/25/2013
			SDG	PH134	PH132	PH132	PH136	PH126	PH126	PH126	PH134
			Start Depth	0	0	4	0	0	0	6.5	0
			End Depth	0.5	0.5	5	0.5	0.5	0.5	7.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.1 U	5.4 U	25 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.3 U	15	5.1 U	5.1 U	5.1 U	5.4 U	10 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	4.7 J Z	5.3 U	45	6.1	11 J FD, Q	3.4 J FD, Z	5.4 U	83
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	12	11 U	59	18	40 J FD, Q	8.9 J FD, Z	11 U	300
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.3 U	5.4 U	5.1 U	5.1 U	5.1 U	5.4 U	25 U

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				Sample Name	SL-634-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-0.0-0.5	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-0.0-0.5	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	11/11/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
				SDG	PH125	PH128	PH128	PH128	PH128	PH128	PH128	PH128
				Start Depth	0	0	3	3	0	4	7	0
				End Depth	0.5	0.5	4	4	0.5	5	8	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.0 U	5.1 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.0 U	5.1 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.0 U	20	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U	5.1 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	43	10 U	10 U	10 U	11 U	11 U	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.0 U	5.1 U	5.1 U	5.2 U	5.1 U	5.3 U	5.3 U	5.1 U

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			Sample Name	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-0.0-0.5	SL-667-SA5A-SB-3.0-4.0	SL-670-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-0.0-0.5	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/22/2013	11/22/2013	11/22/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH133	PH133	PH133
			Start Depth	4	7	0	3	0	0	4	10.5
			End Depth	5	8	0.5	4	0.5	0.5	5	11.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.4 U	5.2 U	5.2 U	5.1 U	5.1 U	5.4 U	5.7 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.5 U	5.4 U	5.2 U	5.2 U	5.1 U	5.1 U	5.4 U	5.7 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.5 U	5.4 U	5.2 U	5.2 U	5.1 U	7.8	7	5.7 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	10 U	10 U	10 U	26	25	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.4 U	5.2 U	5.2 U	5.1 U	5.1 U	5.4 U	5.7 U

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				Sample Name	SL-676-SA5A-SB-0.0-0.5	SL-676-SA5A-SB-4.0-5.0	SL-679-SA5A-SB-0.0-0.5	SL-686-SA5A-SB-0.0-0.5	SL-986-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-0.0-0.5	SL-696-SA5A-SB-4.0-5.0	SL-1008-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	FD	N	N	FD
				Sample Date	11/22/2013	11/22/2013	12/02/2013	11/22/2013	11/22/2013	11/18/2013	11/18/2013	11/19/2013
				SDG	PH133	PH133	PH136	PH133	PH133	PH131	PH131	PH132
				Start Depth	0	4	0	0	0	0	4	0
				End Depth	0.5	5	0.5	0.5	0.5	0.5	5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.5 U	10 U	5.1 U	26 U	5.1 U	5.1 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.5 U	6.4 J Z	2.1 J FD, Z	26 UJ FD	2.7 J Z	5.1 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	9.8	5.5 U	42	32 J FD, Q	130 J FD	23	5.1 U	4.2 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	28	11 U	140	89 J FD	320 J FD	59	10 U	9.4 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.5 U	10 U	5.1 U	26 U	5.1 U	5.1 U	5.1 U

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			Sample Name	SL-708-SA5A-SB-0.0-0.5	SL-708-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-0.0-0.5	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-8.0-9.0	SL-710-SA5A-SB-0.0-0.5	SL-713-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	FD	N	N	N	N
			Sample Date	11/19/2013	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013
			SDG	PH132	PH132	PH131	PH131	PH131	PH131	PH131	PH135
			Start Depth	0	4	0	4	4	8	0	0
			End Depth	0.5	5	0.5	5	5	9	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.3 U	5.1 U	5.1 U	5.1 U	5.2 U	5.0 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.3 U	5.1 U	5.1 UJ FD	2.5 J FD, Z	5.2 U	5.0 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	3.3 J Q, Z	5.3 U	5.1 U	13	16 J Q	5.2 U	5.0 U	5.2 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	9.0 J Q, Z	11 U	10 U	33	38 J Q	10 U	10 U	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.3 U	5.1 U	5.1 U	5.1 U	5.2 U	5.0 U	5.2 U

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				Sample Name	SL-713-SA5A-SB-2.5-3.5	SL-1015-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-0.0-0.5	SL-715-SA5A-SB-6.0-7.0	SL-719-SA5A-SB-0.0-0.5	SL-720-SA5A-SB-0.0-0.5	SL-722-SA5A-SB-0.0-0.5	SL-724-SA5A-SB-0.0-0.5
				Sample Type	N	FD	N	N	N	N	N	N
				Sample Date	11/26/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/18/2013	11/26/2013
				SDG	PH135	PH134	PH134	PH134	PH135	PH135	PH131	PH135
				Start Depth	2.5	0	0	6	0	0	0	0
				End Depth	3.5	0.5	0.5	7	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	26 U	5.1 U	5.1 U	10 U	5.1 U	5.2 U	5.0 U	
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	26 U	5.1 U	5.1 U	10 U	5.1 U	5.2 U	5.0 U	
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.2 U	32 J FD	12 J FD	5.0 J Z	56	5.1 U	5.2 U	2.0 J Z	
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	180 J FD	32 J FD, Q	26	71	10 U	10 U	5.3 J Z	
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	26 U	5.1 U	5.1 U	10 U	5.1 U	5.2 U	5.0 U	

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			Sample Name	SL-732-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-0.0-0.5	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-0.0-0.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-0.0-0.5	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	11/19/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013	11/26/2013
			SDG	PH132	PH131	PH131	PH131	PH131	PH135	PH135	PH135
			Start Depth	0	0	2.5	0	3	0	3	0
			End Depth	0.5	0.5	3.5	0.5	4	0.5	4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.1 U	5.3 U	5.2 U	5.4 U	5.3 U	5.4 UJ S	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.1 U	5.3 U	5.2 U	5.4 U	5.3 U	5.4 UJ S	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.2 U	5.1 U	5.3 U	5.2 U	5.4 U	5.3 U	5.4 UJ S	5.2
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	10 U	11 U	10 U	11 U	5.0 J Z	11 UJ S	14
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.1 U	5.3 U	5.2 U	5.4 U	5.3 U	5.4 UJ S	5.1 U

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				Sample Name	SL-767-SA5A-SB-2.5-3.5	SL-772-SA5A-SB-0.0-0.5	SL-773-SA5A-SB-0.0-0.5	SL-1174-SA5A-SB-0.0-0.5	SL-774-SA5A-SB-0.0-0.5	SL-775-SA5A-SB-0.0-0.5	SL-776-SA5A-SB-0.0-0.5	SL-1176-SA5A-SB-6.0-7.0
				Sample Type	N	N	N	FD	N	N	N	FD
				Sample Date	11/26/2013	06/04/2013	06/10/2013	06/10/2013	06/10/2013	06/13/2013	06/10/2013	06/10/2013
				SDG	PH135	PH047	PH052	PH052	PH052	PH056	PH052	PH052
				Start Depth	2.5	0	0	0	0	0	0	6
				End Depth	3.5	0.5	0.5	0.5	0.5	0.5	0.5	7
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.5 U	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	3.1 J Q, Z	9.8	5.2 U	5.1 U	5.1 U	5.1 U	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	4.1 J Z	5.5 U	38	4.4 J Z	3.0 J Z	6.4	3.0 J Z	5.4 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	13	11 U	28	12 J FD	6.8 J FD, Z	17	10	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.5 U	17	5.2 U	5.1 U	5.1 U	5.1 U	5.4 U

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			Sample Name	SL-776-SA5A-SB-6.0-7.0	SL-777-SA5A-SB-0.0-0.5	SL-779-SA5A-SB-0.0-0.5	SL-780-SA5A-SB-0.0-0.5	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-0.0-0.5	SL-781-SA5A-SB-2.0-3.0
			Sample Type	N	N	N	N	FD	N	N	N
			Sample Date	06/10/2013	06/10/2013	06/10/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013
			SDG	PH052	PH053	PH053	PH058	PH058	PH058	PH055	PH055
			Start Depth	6	0	0	0	3	3	0	2
			End Depth	7	0.5	0.5	0.5	4	4	0.5	3
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.1 U	5.1 U	5.1 U	5.4 U	5.2 U	5.3 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.1 U	5.1 U	5.1 U	5.4 U	5.2 U	5.3 U	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.3 U	7.3	7	15	5.4 U	5.2 U	3.9 J Z	5.2 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	13	20	30	11 U	10 U	8.7 J Z	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.1 U	5.1 U	5.1 U	5.4 U	5.2 U	5.3 U	5.2 U

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				Sample Name	SL-782-SA5A-SB-0.0-0.5	SL-782-SA5A-SB-4.5-5.5	SL-1183-SA5A-SB-0.0-0.5	SL-783-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-0.0-0.5	SL-784-SA5A-SB-2.5-3.5	SL-785-SA5A-SB-0.0-0.5	SL-786-SA5A-SB-0.0-0.5
				Sample Type	N	N	FD	N	N	N	N	N
				Sample Date	06/12/2013	06/12/2013	06/11/2013	06/11/2013	06/12/2013	06/12/2013	06/11/2013	06/11/2013
				SDG	PH055	PH055	PH054	PH054	PH055	PH055	PH054	PH054
				Start Depth	0	4.5	0	0	0	2.5	0	0
				End Depth	0.5	5.5	0.5	0.5	0.5	3.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.3 U	5.3 U	5.2 U	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.3 U	5.3 U	5.2 U	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.3 U	5.3 U	5.2 UJ FD	11 J FD, Q	5.2 U	5.0 J Z	10	17
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	10 UJ FD	25 J FD	10 U	8.1 J Z	25	35
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.3 U	5.3 U	5.2 U	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U

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			Sample Name	SL-787-SA5A-SB-0.0-0.5	SL-788-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-0.0-0.5	SL-789-SA5A-SB-5.0-6.0	SL-790-SA5A-SB-0.0-0.5	SL-791-SA5A-SB-0.0-0.5	SL-792-SA5A-SB-0.0-0.5	SL-793-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/11/2013	06/11/2013	06/11/2013	06/13/2013	06/13/2013	06/13/2013	06/13/2013
			SDG	PH054	PH054	PH054	PH054	PH056	PH056	PH056	PH056
			Start Depth	0	0	0	5	0	0	0	0
			End Depth	0.5	0.5	0.5	6	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.0 U	5.1 U	5.3 U	5.1 U	5.1 U	5.1 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.0 U	5.1 U	5.3 U	5.1 U	5.1 U	5.1 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	2.6 J Z	12	11	2.1 J Z	8.3	12	2.4 J Z	6
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	7.0 J Z	32	26	11 U	22	35	6.1 J Z	15
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.0 U	5.1 U	5.3 U	5.1 U	5.1 U	5.1 U	5.1 U

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				Sample Name	SL-795-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-0.0-0.5	SL-811-SA5A-SB-5.5-6.5	SL-813-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-0.0-0.5	SL-814-SA5A-SB-4.0-5.0	SL-815-SA5A-SB-0.0-0.5	SL-819-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	06/13/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	06/05/2013	05/31/2013	05/30/2013
				SDG	PH056	PH047	PH047	PH047	PH047	PH047	PH044	PH043
				Start Depth	0	0	5.5	0	0	4	0	0
				End Depth	0.5	0.5	6.5	0.5	0.5	5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U	5.3 U	5.1 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	4.2 J Z	5.1 U	5.2 U	5.1 U	5.1 U	5.3 U	2.5 J Z	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	16	7.5	5.2 U	14	7.3	5.3 U	22	5.9
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	26	16	10 U	28	23	11 U	42	11
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U	5.3 U	5.1 U	5.2 U

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			Sample Name	SL-819-SA5A-SB-6.5-7.5	SL-822-SA5A-SB-0.0-0.5	SL-823-SA5A-SB-0.0-0.5	SL-824-SA5A-SB-0.0-0.5	SL-825-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-0.0-0.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/30/2013	06/17/2013	06/17/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH043	PH058	PH058	PH058	PH058	PH055	PH055	PH055
			Start Depth	6.5	0	0	0	0	0	4	9
			End Depth	7.5	0.5	0.5	0.5	0.5	0.5	5	10
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.6 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.5 U	5.3 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.6 U	2.0 J Z	5.1 U	5.1 U	5.0 U	5.1 U	5.5 U	2.3 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	2.5 J Z	19	8.8	14	9.8	3.5 J Z	3.0 J Z	9.1
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	4.9 J Z	47	18	30	29	5.8 J Z	7.2 J Z	13
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.6 U	5.1 U	5.1 U	5.1 U	5.0 U	5.1 U	5.5 U	5.3 U

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			Sample Name	SL-826-SA5A-SB-14.0-15.0	SL-827-SA5A-SB-0.0-0.5	SL-828-SA5A-SB-0.0-0.5	SL-829-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-0.0-0.5	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-0.0-0.5	SL-831-SA5A-SB-4.5-5.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/12/2013	06/07/2013	05/28/2013	05/28/2013	05/28/2013	05/28/2013	05/29/2013	05/29/2013
			SDG	PH055	PH051	PH041	PH041	PH041	PH041	PH042	PH042
			Start Depth	14	0	0	0	0	2.75	0	4.5
			End Depth	15	0.5	0.5	0.5	0.5	3.75	0.5	5.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.4 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.4 U	5.1 U	5.1 U	5.1 U	2.9 J Z	5.2 U	3.2 J Z	5.2 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.4 U	8.7	15	7.6	21	4.3 J Z	19	3.7 J Z
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	19	30	11	37	14 J Q	36	10
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.4 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U

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			Sample Name	SL-832-SA5A-SB-0.0-0.5	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-0.0-0.5	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-0.0-0.5	SL-834-SA5A-SB-2.4-3.4	SL-835-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/29/2013	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013
			SDG	PH042	PH042	PH042	PH043	PH043	PH043	PH043	PH043
			Start Depth	0	4	7.2	0	2.5	0	2.4	0
			End Depth	0.5	5	8.2	0.5	3.5	0.5	3.4	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.2 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.2 U	4.6 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	7.4	5.8	5.2 U	4.3 J Z	2.9 J Z	3.8 J Z	5.2 U	28
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	18	15	10 U	10	4.7 J Z	9.7 J Z	4.8 J Z	41
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.2 U	5.4 U

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				Sample Name	SL-836-SA5A-SB-0.0-0.5	SL-836-SA5A-SB-2.5-3.5	SL-837-SA5A-SB-0.0-0.5	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-1238-SA5A-SB-0.0-0.5	SL-838-SA5A-SB-0.0-0.5	SL-839-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	FD	N	N
				Sample Date	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/30/2013	05/31/2013	05/31/2013	05/31/2013
				SDG	PH043	PH043	PH043	PH043	PH043	PH044	PH044	PH044
				Start Depth	0	2.5	0	4.5	4.5	0	0	0
				End Depth	0.5	3.5	0.5	5.5	5.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.8 U	5.2 U	5.2 U	5.3 U	5.5 U	5.2 U	5.2 U	5.3 U	
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.8 U	5.2 U	5.2 U	5.3 U	5.5 U	5.2 U	5.2 U	5.3 U	
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	8.5	3.1 J Z	13	3.0 J Z	3.7 J Q, Z	11	7.3 J Q	12	
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	16	8.7 J Z	22	7.9 J Z	10 J Q, Z	21	18 J Q	19	
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.8 U	5.2 U	5.2 U	5.3 U	5.5 U	5.2 U	5.2 U	5.3 U	

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			Sample Name	SL-840-SA5A-SB-0.0-0.5	SL-841-SA5A-SB-0.0-0.5	SL-842-SA5A-SB-0.0-0.5	SL-844-SA5A-SB-0.0-0.5	SL-846-SA5A-SB-0.0-0.5	SL-847-SA5A-SB-0.0-0.5	SL-848-SA5A-SB-0.0-0.5	SL-849-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	05/31/2013	05/31/2013	05/29/2013	05/29/2013	06/07/2013	06/07/2013	06/07/2013	07/29/2013
			SDG	PH044	PH044	PH042	PH042	PH051	PH051	PH051	PH077
			Start Depth	0	0	0	0	0	0	0	0
			End Depth	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.7 U	5.2 U	5.1 U	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	6.3	5.2 U	5.1 U	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	30	5.2	7.8	4.6 J Z	14	7.5	11	5.1 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	44	12	17	12	31	26	28	10 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.7 U	5.2 U	5.1 U	5.1 U	5.2 U	5.0 U	5.0 U	5.1 U

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			Sample Name	SL-850-SA5A-SB-0.0-0.5	SL-851-SA5A-SB-0.0-0.5	SL-1252-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-0.0-0.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-0.0-0.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-0.0-0.5
			Sample Type	N	N	FD	N	N	N	N	N
			Sample Date	06/14/2013	07/29/2013	06/14/2013	06/14/2013	06/14/2013	07/29/2013	07/29/2013	06/18/2013
			SDG	PH057	PH077	PH057	PH057	PH057	PH077	PH077	PH059
			Start Depth	0	0	0	0	4.5	0	3.5	0
			End Depth	0.5	0.5	0.5	0.5	5.5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.1 U	5.0 U	5.0 U	5.5 U	5.1 U	5.4 U	5.1 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.1 U	5.0 U	5.0 U	5.5 U	5.1 U	5.4 U	5.1 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.1 U	4.5 J Z	7.6	8.1 J Q	5.5 U	5.7	5.4 U	6.9 J Q
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	15	21	22	11 U	20	11 U	17 J Q
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.1 U	5.0 U	5.0 U	5.5 U	5.1 U	5.4 U	5.1 U

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			Sample Name	SL-854-SA5A-SB-4.0-5.0	SL-855-SA5A-SB-0.0-0.5	SL-858-SA5A-SB-0.0-0.5	SL-859-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-0.0-0.5	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5	SL-861-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/18/2013	06/18/2013	06/05/2013	06/19/2013	06/18/2013	06/18/2013	06/18/2013	06/05/2013
			SDG	PH059	PH059	PH047	PH060	PH059	PH059	PH059	PH047
			Start Depth	4	0	0	0	0	4	10.5	0
			End Depth	5	0.5	0.5	0.5	0.5	5	11.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.2 U	5.1 U	53 U	10 U	10 U	5.4 U	5.2 U	52 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.2 U	5.1 U	53 U	10 U	5.2 J Z	5.4 U	5.2 U	52 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.2 U	9	110	25	19	2.4 J Z	5.2 U	71
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	23	290	85	34	11 U	10 U	210
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.2 U	5.1 U	53 U	10 U	10 U	5.4 U	5.2 U	52 U

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				Sample Name	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0	SL-862-SA5A-SB-0.0-0.5	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-0.0-0.5	SL-863-SA5A-SB-4.0-5.0	SL-864-SA5A-SB-0.0-0.5	SL-864-SA5A-SB-4.0-5.0
				Sample Type	N	N	N	N	N	N	N	N
				Sample Date	06/05/2013	06/05/2013	06/06/2013	06/06/2013	06/19/2013	06/19/2013	06/18/2013	06/18/2013
				SDG	PH047	PH047	PH050	PH050	PH060	PH060	PH059	PH059
				Start Depth	4	7	0	4.5	0	4	0	4
				End Depth	5	8	0.5	5.5	0.5	5	0.5	5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.5 U	5.6 U	25 U	5.2 U	52 U	5.2 U	5.1 U	5.4 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.5 U	5.6 U	25 U	5.2 U	52 U	5.2 U	2.3 J Z	5.4 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.5 U	5.6 U	37	5.2 U	350	6.6	30	5.4 U
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	11 U	11 U	130	10 U	710	12	72	11 U
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.5 U	5.6 U	25 U	5.2 U	52 U	5.2 U	5.1 U	5.4 U

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			Sample Name	SL-865-SA5A-SB-0.0-0.5	SL-865-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-9.0-10.0	SL-866-SA5A-SB-0.0-0.5	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-0.0-0.5	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-0.0-0.5
			Sample Type	N	N	N	N	N	N	N	N
			Sample Date	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/19/2013	06/20/2013	06/20/2013	06/20/2013
			SDG	PH060	PH060	PH060	PH060	PH060	PH061	PH061	PH061
			Start Depth	0	4	9	0	5.5	0	3.5	0
			End Depth	0.5	5	10	0.5	6.5	0.5	4.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit								
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.2 U	5.4 U	26 U	5.2 U	5.1 U	5.1 U	5.0 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.2 U	5.4 U	26 U	5.2 U	5.1 U	5.1 U	5.0 U
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	4.6 J Z	6	5.4 U	70	18	19	8.4	9.9
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	9.9 J Z	14	11 U	200	26	55	18	26
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.2 U	5.4 U	26 U	5.2 U	5.1 U	5.1 U	5.0 U

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				Sample Name	SL-868-SA5A-SB-4.0-5.0	SL-869-SA5A-SB-0.0-0.5	SL-870-SA5A-SB-0.0-0.5	SL-1271-SA5A-SB-0.0-0.5	SL-871-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-0.0-0.5	SL-872-SA5A-SB-2.5-3.5	SL-873-SA5A-SB-0.0-0.5
				Sample Type	N	N	N	FD	N	N	N	N
				Sample Date	06/20/2013	06/14/2013	06/14/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013	06/06/2013
				SDG	PH061	PH057	PH057	PH050	PH050	PH050	PH050	PH050
				Start Depth	4	0	0	0	0	0	2.5	0
				End Depth	5	0.5	0.5	0.5	0.5	0.5	3.5	0.5
Analytic Method	CAS Number	Chemical Name	Unit									
8015M	PHCC12C14	EFH (C12-C14)	mg/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.3 U	5.5 U
8015M	PHCC15C20	EFH (C15-C20)	mg/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	2.2 J Z	5.3 U	2.3 J Z
8015M	PHCC21C30	EFH (C21-C30)	mg/kg	5.1 U	5.1	12	6.2	7.2 J Q	11	6.2	6.1
8015M	PHCC30C40	EFH (C30-C40)	mg/kg	10 U	14	34	15	15 J Q	31	16	10 J Z
8015M	PHCC8C11	EFH (C8-C11)	mg/kg	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.3 U	5.5 U

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			Sample Name	SL-508-SA5A-SB-4.0-5.0	SL-508-SA5A-SB-9.0-10.0	SL-508-SA5A-SB-17.0-18.0	SL-508-SA5A-SB-21.0-22.0	SL-508-SA5A-SB-33.0-34.0	SL-518-SA5A-SB-7.0-8.0	SL-518-SA5A-SB-10.0-11.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/19/2013
			SDG	PH129	PH129	PH129	PH129	PH129	PH132	PH132
			Start Depth	4	9	17	21	33	7	10
			End Depth	5	10	18	22	34	8	11
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	3.4 J Z	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U	1.0 U

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			Sample Name	SL-518-SA5A-SB-15.0-16.0	SL-521-SA5A-SB-9.0-10.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0	SL-596-SA5A-SB-4.0-5.0	SL-628-SA5A-SB-6.5-7.5
			Sample Type	N	N	N	FD	N	N	N
			Sample Date	11/19/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/19/2013	11/12/2013
			SDG	PH132	PH129	PH129	PH129	PH129	PH132	PH126
			Start Depth	15	9	11	11	14	4	6.5
			End Depth	16	10	12	12	15	5	7.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	0.6 J Z	1.0 U

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			Sample Name	SL-654-SA5A-SB-3.0-4.0	SL-954-SA5A-SB-3.0-4.0	SL-657-SA5A-SB-4.0-5.0	SL-657-SA5A-SB-7.0-8.0	SL-658-SA5A-SB-4.0-5.0	SL-658-SA5A-SB-7.0-8.0	SL-667-SA5A-SB-3.0-4.0
			Sample Type	N	FD	N	N	N	N	N
			Sample Date	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013	11/13/2013
			SDG	PH128	PH128	PH128	PH128	PH128	PH128	PH128
			Start Depth	3	3	4	7	4	7	3
			End Depth	4	4	5	8	5	8	4
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.1 U

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			Sample Name	SL-673-SA5A-SB-4.0-5.0	SL-673-SA5A-SB-10.5-11.5	SL-676-SA5A-SB-4.0-5.0	SL-696-SA5A-SB-4.0-5.0	SL-708-SA5A-SB-4.0-5.0	SL-1009-SA5A-SB-4.0-5.0	SL-709-SA5A-SB-4.0-5.0
			Sample Type	N	N	N	N	N	FD	N
			Sample Date	11/22/2013	11/22/2013	11/22/2013	11/18/2013	11/19/2013	11/18/2013	11/18/2013
			SDG	PH133	PH133	PH133	PH131	PH132	PH131	PH131
			Start Depth	4	10.5	4	4	4	4	4
			End Depth	5	11.5	5	5	5	5	5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.5 J Z	1.1 U	0.9 U	1.1 U	13 U	1.0 U	1.1 U

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			Sample Name	SL-709-SA5A-SB-8.0-9.0	SL-713-SA5A-SB-2.5-3.5	SL-715-SA5A-SB-6.0-7.0	SL-735-SA5A-SB-2.5-3.5	SL-736-SA5A-SB-3.0-4.0	SL-738-SA5A-SB-3.0-4.0	SL-767-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	11/18/2013	11/26/2013	11/25/2013	11/18/2013	11/18/2013	11/26/2013	11/26/2013
			SDG	PH131	PH135	PH134	PH131	PH131	PH135	PH135
			Start Depth	8	2.5	6	2.5	3	3	2.5
			End Depth	9	3.5	7	3.5	4	4	3.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.0 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-1176-SA5A-SB-6.0-7.0	SL-776-SA5A-SB-6.0-7.0	SL-1180-SA5A-SB-3.0-4.0	SL-780-SA5A-SB-3.0-4.0	SL-781-SA5A-SB-2.0-3.0	SL-782-SA5A-SB-4.5-5.5	SL-784-SA5A-SB-2.5-3.5
			Sample Type	FD	N	FD	N	N	N	N
			Sample Date	06/10/2013	06/10/2013	06/17/2013	06/17/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH053	PH053	PH058	PH058	PH055	PH055	PH055
			Start Depth	6	6	3	3	2	4.5	2.5
			End Depth	7	7	4	4	3	5.5	3.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	0.4 J FD, Z	1 UJ FD	1.2 U	1.0 U	1.0 U	1.1 U	1.0 U

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			Sample Name	SL-789-SA5A-SB-5.0-6.0	SL-811-SA5A-SB-5.5-6.5	SL-814-SA5A-SB-4.0-5.0	SL-819-SA5A-SB-6.5-7.5	SL-826-SA5A-SB-4.0-5.0	SL-826-SA5A-SB-9.0-10.0	SL-826-SA5A-SB-14.0-15.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	06/11/2013	06/05/2013	06/05/2013	05/30/2013	06/12/2013	06/12/2013	06/12/2013
			SDG	PH054	PH047	PH047	PH043	PH055	PH055	PH055
			Start Depth	5	5.5	4	6.5	4	9	14
			End Depth	6	6.5	5	7.5	5	10	15
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1 U

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			Sample Name	SL-830-SA5A-SB-2.75-3.75	SL-831-SA5A-SB-4.5-5.5	SL-832-SA5A-SB-4.0-5.0	SL-832-SA5A-SB-7.2-8.2	SL-833-SA5A-SB-2.5-3.5	SL-834-SA5A-SB-2.4-3.4	SL-836-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N	N	N	N
			Sample Date	05/28/2013	05/29/2013	05/29/2013	05/29/2013	05/30/2013	05/30/2013	05/30/2013
			SDG	PH041	PH042	PH042	PH042	PH043	PH043	PH043
			Start Depth	2.75	4.5	4	7.2	2.5	2.4	2.5
			End Depth	3.75	5.5	5	8.2	3.5	3.4	3.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.2 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U

U – Compound not detected above reporting limit
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			Sample Name	SL-1237-SA5A-SB-4.5-5.5	SL-837-SA5A-SB-4.5-5.5	SL-852-SA5A-SB-4.5-5.5	SL-853-SA5A-SB-3.5-4.5	SL-854-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-4.0-5.0	SL-860-SA5A-SB-10.5-11.5
			Sample Type	FD	N	N	N	N	N	N
			Sample Date	05/30/2013	05/30/2013	06/14/2013	07/29/2013	06/18/2013	06/18/2013	06/18/2013
			SDG	PH043	PH043	PH057	PH077	PH059	PH059	PH059
			Start Depth	4.5	4.5	4.5	3.5	4	4	10.5
			End Depth	5.5	5.5	5.5	4.5	5	5	11.5
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-861-SA5A-SB-4.0-5.0	SL-861-SA5A-SB-7.0-8.0	SL-862-SA5A-SB-4.5-5.5	SL-863-SA5A-SB-4.0-5.0	SL-864-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-4.0-5.0	SL-865-SA5A-SB-9.0-10.0
			Sample Type	N	N	N	N	N	N	N
			Sample Date	06/05/2013	06/05/2013	06/06/2013	06/19/2013	06/18/2013	06/19/2013	06/19/2013
			SDG	PH047	PH047	PH050	PH060	PH059	PH060	PH060
			Start Depth	4	7	4.5	4	4	4	9
			End Depth	5	8	5.5	5	5	5	10
Analytic Method	CAS Number	Chemical Name	Unit							
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.0 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

			Sample Name	SL-866-SA5A-SB-5.5-6.5	SL-867-SA5A-SB-3.5-4.5	SL-868-SA5A-SB-4.0-5.0	SL-872-SA5A-SB-2.5-3.5
			Sample Type	N	N	N	N
			Sample Date	06/19/2013	06/20/2013	06/20/2013	06/06/2013
			SDG	PH060	PH061	PH061	PH050
			Start Depth	5.5	3.5	4	2.5
			End Depth	6.5	4.5	5	3.5
Analytic Method	CAS Number	Chemical Name	Unit				
8015M	GROC5C12	Gasoline Range Organics (C5-C12)	mg/kg	1.1 U	1.1 U	1.1 U	1.1 U

U – Compound not detected above reporting limit
J – Result is an estimated value
R – Result is rejected
(Z, etc.) – Specific description qualifiers that are applied during validation. Definitions are provided at the beginning of Appendix A. The letters in parenthesis can vary and there can be more than one letter.

				Sample Name	SL-518-SA5A-SB-7.0-8.0	SL-518-SA5A-SB-10.0-11.0	SL-521-SA5A-SB-11.0-12.0	SL-821-SA5A-SB-11.0-12.0	SL-521-SA5A-SB-14.0-15.0
				Sample Type	N	N	N	FD	N
				Sample Date	11/19/2013	11/19/2013	11/14/2013	11/14/2013	11/14/2013
				SDG	PH132	PH132	PH129	PH129	PH129
				Start Depth	7	10	11	11	14
				End Depth	8	11	12	12	15
Analytic Method	CAS Number	Chemical Name	Unit						
8260B	100-41-4	Ethylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	100-42-5	Styrene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	10061-01-5	cis-1,3-Dichloropropene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	10061-02-6	trans-1,3-Dichloropropene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	103-65-1	n-Propylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	104-51-8	n-Butylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	106-43-4	4-Chlorotoluene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	106-46-7	1,4-Dichlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	106-93-4	1,2-Dibromoethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	107-02-8	Acrolein	µg/kg	110 U	100 U	110 U	110 U	110 U
8260B	107-06-2	1,2-Dichloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	107-13-1	Acrylonitrile	µg/kg	23 U	20 U	21 U	22 U	21 U
8260B	108-05-4	Vinyl Acetate	µg/kg	11 U	10 U	11 U	11 U	11 U
8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	µg/kg	11 U	10 U	11 U	11 U	11 U
8260B	108-20-3	Di isopropyl Ether	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	108-67-8	1,3,5-Trimethylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	108-86-1	Bromobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	108-88-3	Toluene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	108-90-7	Chlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	110-75-8	2-Chloroethyl Vinyl Ether	µg/kg	11 U	10 U	11 U	11 U	11 U
8260B	120-82-1	1,2,4-Trichlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	124-48-1	Dibromochloromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	127-18-4	Tetrachloroethene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	135-98-8	2-Phenylbutane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	142-28-9	1,3-Dichloropropane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	156-59-2	cis-1,2-Dichloroethene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	156-60-5	trans-1,2-Dichloroethene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	1634-04-4	Methyl Tert-Butyl Ether	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	179601-23-1	m,p-Xylene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	541-73-1	1,3-Dichlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	544-10-5	1-Chlorohexane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	56-23-5	Carbon Tetrachloride	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	563-58-6	1,1-Dichloropropene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	591-78-6	2-Hexanone	µg/kg	11 U	10 U	11 U	11 U	11 U
8260B	594-20-7	2,2-Dichloropropane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	630-20-6	1,1,1,2-Tetrachloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	637-92-3	tert-Butyl ethyl ether	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	67-64-1	Acetone	µg/kg	62	29	32	36	21 U
8260B	67-66-3	Chloroform	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	71-43-2	Benzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	71-55-6	1,1,1-Trichloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	74-83-9	Bromomethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	74-87-3	Chloromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	74-88-4	Methyl Iodide	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	74-95-3	Dibromomethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	74-97-5	Bromochloromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-00-3	Chloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-01-4	Vinyl Chloride	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-09-2	Methylene Chloride	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-15-0	Carbon Disulfide	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-25-2	Bromoform	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-27-4	Bromodichloromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-34-3	1,1-Dichloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-35-4	1,1-Dichloroethene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-65-0	Tertiary butyl alcohol	µg/kg	57 U	50 U	53 U	54 U	53 U
8260B	75-69-4	Trichlorofluoromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-71-8	Dichlorodifluoromethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	75-88-7	2-Chloro-1,1,1-trifluoroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	78-87-5	1,2-Dichloropropane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	78-93-3	2-Butanone (MEK)	µg/kg	12	5 J Z	11 UJ FD	5 J FD, Z	11 U
8260B	79-00-5	1,1,2-Trichloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	79-01-6	Trichloroethene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	79-34-5	1,1,2,2-Tetrachloroethane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	79-38-9	Chlorotrifluoroethylene	µg/kg	6 U	5 U	5 UJ Q	5 U	5 U
8260B	87-61-6	1,2,3-Trichlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	87-68-3	Hexachloro-1,3-butadiene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	95-47-6	o-Xylene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	95-49-8	2-Chlorotoluene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	95-50-1	1,2-Dichlorobenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	95-63-6	1,2,4-Trimethylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	96-12-8	1,2-Dibromo-3-chloropropane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	96-18-4	1,2,3-Trichloropropane	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	98-06-6	tert-Butylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	98-82-8	Isopropylbenzene	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	994-05-8	Tertiary amyl methyl ether	µg/kg	6 U	5 U	5 U	5 U	5 U
8260B	99-87-6	Cymene	µg/kg	6 U	5 U	5 U	5 U	5 U

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Appendix B
Laboratory Reports
(On CD)

eurofins | Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 10, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 05/29/2013
Group Number: 1393100
SDG: PH041
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
TB-052813 Water	7073185
SL-830-SA5A-SB-0.0-0.5 Soil	7073186
SL-830-SA5A-SB-2.75-3.75 Soil	7073187
SL-828-SA5A-SB-0.0-0.5 Soil	7073188
SL-829-SA5A-SB-0.0-0.5 Soil	7073189

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-052813 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7073185
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 08:00

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

CDTB1 SDG#: PH041-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13156C20A	06/06/2013 14:25	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13156C20A	06/06/2013 14:25	Laura M Krieger	1

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

Sample Description: SL-830-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073186
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 10:55 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83000 SDG#: PH041-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.9	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	21		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	37		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 15:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.69	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.0	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.2	J	19	6.2	1
12969	Fluoranthene	206-44-0	1.0	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.93	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	0.94	J	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	28.09
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.3	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	14		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		41.1	7.93	1
06944	Antimony	7440-36-0	0.723	J	4.11	0.514	1
06935	Arsenic	7440-38-2	6.31		4.11	0.339	1
06946	Barium	7440-39-3	75.0		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.758	J	1.03	0.0689	1
07914	Boron	7440-42-8	1.65	J	10.3	0.853	1
06949	Cadmium	7440-43-9	0.216	J	1.03	0.0339	1
01650	Calcium	7440-70-2	2,330		20.6	4.13	1
06951	Chromium	7440-47-3	26.7		3.08	0.0905	1

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	8.19		1.03	0.0925	1
06953	Copper	7440-50-8	12.1		2.06	0.185	1
01654	Iron	7439-89-6	25,100		41.1	3.91	1
06955	Lead	7439-92-1	10.0		3.08	0.483	1
01656	Lithium	7439-93-2	27.1		4.1	0.57	1
01657	Magnesium	7439-95-4	5,090		10.3	1.78	1
06958	Manganese	7439-96-5	299		1.03	0.0853	1
06960	Molybdenum	7439-98-7	0.641	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.3		2.06	0.113	1
10145	Phosphorus	7723-14-0	214		10.3	0.524	1
01662	Potassium	7440-09-7	2,410		103	13.9	1
01667	Sodium	7440-23-5	87.4	J	103	17.2	1
06969	Tin	7440-31-5	3.11	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,300		1.03	0.175	1
06971	Vanadium	7440-62-2	46.5		1.03	0.113	1
06972	Zinc	7440-66-6	55.0		4.11	0.206	1
10146	Zirconium	7440-67-7	4.10	J	5.14	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.121	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0494	J	0.206	0.0206	2
06144	Strontium	7440-24-6	21.2		0.411	0.0350	2
06145	Thallium	7440-28-0	0.284		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.97		0.0100	0.0100	1
	The pH was measured in water at 23.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0831	JQ	1.02	0.0316	1
11031	12378-PeCDD	40321-76-4	0.642	JB	5.12	0.0552	1
11031	123478-HxCDD	39227-28-6	1.09	J	5.12	0.0630	1
11031	123678-HxCDD	57653-85-7	4.21	J	5.12	0.0685	1
11031	123789-HxCDD	19408-74-3	1.99	J	5.12	0.0653	1
11031	1234678-HpCDD	35822-46-9	100	B	5.12	0.0975	1
11031	OCDD	3268-87-9	828	B	10.2	0.0742	1
11031	2378-TCDF	51207-31-9	0.259	JBQ	1.02	0.0657	1
11031	12378-PeCDF	57117-41-6	0.718	JB	5.12	0.0348	1
11031	23478-PeCDF	57117-31-4	0.815	J	5.12	0.0335	1
11031	123478-HxCDF	70648-26-9	0.811	JB	5.12	0.0501	1
11031	123678-HxCDF	57117-44-9	0.797	JB	5.12	0.0443	1
11031	123789-HxCDF	72918-21-9	0.204	J	5.12	0.0535	1
11031	234678-HxCDF	60851-34-5	1.05	JB	5.12	0.0474	1
11031	1234678-HpCDF	67562-39-4	13.5	B	5.12	0.0286	1
11031	1234789-HpCDF	55673-89-7	1.13	JB	5.12	0.0468	1
11031	OCDF	39001-02-0	36.1	B	10.2	0.0515	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.33				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13150SLL026	06/08/2013 02:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13150SLL026	05/31/2013 11:15	Denise L Trimby	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/04/2013 21:00	Laura M Krieger	28.09
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201314931238	05/29/2013 23:03	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201314931238	05/29/2013 23:04	Lois E Hiltz	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 16:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13150002	06/01/2013 00:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13150002	05/30/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:20	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:52	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 12:52	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:20	David K Beck	2

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

Sample Description: SL-830-SA5A-SB-2.75-3.75 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073187
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 11:35 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

83027 SDG#: PH041-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:52	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 12:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13149039401A	05/29/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.72	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.88	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.0		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.77	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.72	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.5		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.7	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.5		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.89	J	1.7	0.68	1
12969	Naphthalene	91-20-3	2.3		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.8		1.7	0.68	1
12969	Pyrene	129-00-0	1.7	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	15		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	30		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		39.0	7.53	1
06944	Antimony	7440-36-0	0.594	J	3.90	0.488	1
06935	Arsenic	7440-38-2	4.61		3.90	0.322	1
06946	Barium	7440-39-3	101		0.976	0.0322	1
06947	Beryllium	7440-41-7	0.587	J	0.976	0.0654	1
07914	Boron	7440-42-8	3.10	J	9.76	0.810	1
06949	Cadmium	7440-43-9	0.314	J	0.976	0.0322	1
01650	Calcium	7440-70-2	2,020		19.5	3.92	1
06951	Chromium	7440-47-3	18.9		2.93	0.0859	1
06952	Cobalt	7440-48-4	5.58		0.976	0.0879	1
06953	Copper	7440-50-8	10.8		1.95	0.176	1
01654	Iron	7439-89-6	19,100		39.0	3.71	1
06955	Lead	7439-92-1	10.6		2.93	0.459	1
01656	Lithium	7439-93-2	18.2		3.9	0.54	1

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,650		9.76	1.69	1
06958	Manganese	7439-96-5	334		0.976	0.0810	1
06960	Molybdenum	7439-98-7	0.650	J	1.95	0.166	1
06961	Nickel	7440-02-0	12.6		1.95	0.107	1
10145	Phosphorus	7723-14-0	389		9.76	0.498	1
01662	Potassium	7440-09-7	3,460		97.6	13.2	1
01667	Sodium	7440-23-5	61.6	J	97.6	16.3	1
06969	Tin	7440-31-5	2.52	J	9.76	0.215	1
06970	Titanium	7440-32-6	929		0.976	0.166	1
06971	Vanadium	7440-62-2	33.1		0.976	0.107	1
06972	Zinc	7440-66-6	53.3		3.90	0.195	1
10146	Zirconium	7440-67-7	3.22	J	4.88	0.810	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.119	J	0.390	0.0976	2
06142	Silver	7440-22-4	0.0566	J	0.195	0.0195	2
06144	Strontium	7440-24-6	20.6		0.390	0.0332	2
06145	Thallium	7440-28-0	0.239		0.195	0.0293	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0108	J	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.29		0.0100	0.0100	1
	The pH was measured in water at 23.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0599	J	1.00	0.0452	1
11031	12378-PeCDD	40321-76-4	0.498	JB	5.00	0.0683	1
11031	123478-HxCDD	39227-28-6	0.665	JQ	5.00	0.0873	1
11031	123678-HxCDD	57653-85-7	1.75	J	5.00	0.0925	1
11031	123789-HxCDD	19408-74-3	1.75	J	5.00	0.0924	1
11031	1234678-HpCDD	35822-46-9	46.0	B	5.00	0.112	1
11031	OCDD	3268-87-9	533	B	10.0	0.0760	1
11031	2378-TCDF	51207-31-9	0.211	JBQ	1.00	0.0840	1
11031	12378-PeCDF	57117-41-6	0.568	JB	5.00	0.0410	1
11031	23478-PeCDF	57117-31-4	0.493	J	5.00	0.0444	1
11031	123478-HxCDF	70648-26-9	0.540	JBQ	5.00	0.0568	1
11031	123678-HxCDF	57117-44-9	0.471	JB	5.00	0.0501	1
11031	123789-HxCDF	72918-21-9	0.320	JQ	5.00	0.0707	1
11031	234678-HxCDF	60851-34-5	0.696	JB	5.00	0.0570	1
11031	1234678-HpCDF	67562-39-4	11.8	B	5.00	0.0418	1
11031	1234789-HpCDF	55673-89-7	1.19	JB	5.00	0.0829	1
11031	OCDF	39001-02-0	41.3	B	10.0	0.0656	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.95				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLC026	06/10/2013 01:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13159SLC026	06/08/2013 09:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 17:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13150002	06/01/2013 01:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13150002	05/30/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:24	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:55	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 12:55	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:21	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:55	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 12:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-828-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073188
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 13:40 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82800 SDG#: PH041-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13149039401A	05/29/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.69	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.8	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.5		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.80	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	3.6		1.7	0.67	1
12969	Pyrene	129-00-0	2.8		1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.6		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	11		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,000		39.9	7.69	1
06944	Antimony	7440-36-0	0.570	J	3.99	0.499	1
06935	Arsenic	7440-38-2	4.67		3.99	0.329	1
06946	Barium	7440-39-3	102		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.685	J	0.997	0.0668	1
07914	Boron	7440-42-8	3.01	J	9.97	0.828	1
06949	Cadmium	7440-43-9	0.238	J	0.997	0.0329	1
01650	Calcium	7440-70-2	2,010		19.9	4.01	1
06951	Chromium	7440-47-3	22.1		2.99	0.0878	1
06952	Cobalt	7440-48-4	6.63		0.997	0.0898	1
06953	Copper	7440-50-8	10.6		1.99	0.180	1
01654	Iron	7439-89-6	20,400		39.9	3.79	1
06955	Lead	7439-92-1	8.14		2.99	0.469	1
01656	Lithium	7439-93-2	21.4		4.0	0.55	1

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,020		9.97	1.73	1
06958	Manganese	7439-96-5	331		0.997	0.0828	1
06960	Molybdenum	7439-98-7	0.800	J	1.99	0.170	1
06961	Nickel	7440-02-0	13.9		1.99	0.110	1
10145	Phosphorus	7723-14-0	305		9.97	0.509	1
01662	Potassium	7440-09-7	3,550		99.7	13.5	1
01667	Sodium	7440-23-5	81.0	J	99.7	16.7	1
06969	Tin	7440-31-5	2.82	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,140		0.997	0.170	1
06971	Vanadium	7440-62-2	36.8		0.997	0.110	1
06972	Zinc	7440-66-6	53.0		3.99	0.199	1
10146	Zirconium	7440-67-7	4.03	J	4.99	0.828	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.399	U	0.399	0.0997	2
06142	Silver	7440-22-4	0.0477	J	0.199	0.0199	2
06144	Strontium	7440-24-6	21.8		0.399	0.0339	2
06145	Thallium	7440-28-0	0.293		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0118	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32		0.0100	0.0100	1
	The pH was measured in water at 23.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0373	J	0.992	0.0328	1
11031	12378-PeCDD	40321-76-4	0.383	JBQ	4.96	0.0492	1
11031	123478-HxCDD	39227-28-6	1.00	J	4.96	0.0603	1
11031	123678-HxCDD	57653-85-7	2.04	J	4.96	0.0615	1
11031	123789-HxCDD	19408-74-3	2.23	J	4.96	0.0635	1
11031	1234678-HpCDD	35822-46-9	71.4	B	4.96	0.0956	1
11031	OCDD	3268-87-9	758	B	9.92	0.0769	1
11031	2378-TCDF	51207-31-9	0.0590	JBQ	0.992	0.0531	1
11031	12378-PeCDF	57117-41-6	0.152	JB	4.96	0.0244	1
11031	23478-PeCDF	57117-31-4	0.200	J	4.96	0.0273	1
11031	123478-HxCDF	70648-26-9	0.666	JB	4.96	0.0505	1
11031	123678-HxCDF	57117-44-9	0.674	JBQ	4.96	0.0451	1
11031	123789-HxCDF	72918-21-9	0.195	J	4.96	0.0600	1
11031	234678-HxCDF	60851-34-5	0.840	JB	4.96	0.0517	1
11031	1234678-HpCDF	67562-39-4	19.3	B	4.96	0.0298	1
11031	1234789-HpCDF	55673-89-7	2.04	JB	4.96	0.0577	1
11031	OCDF	39001-02-0	72.4	B	9.92	0.0610	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.98				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	107	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLC026	06/10/2013 02:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13159SLC026	06/08/2013 09:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 17:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13150002	06/01/2013 02:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13150002	05/30/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:35	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:02	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:02	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:27	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:02	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 12:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-829-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7073189
LLI Group # 1393100
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/28/2013 14:15 by VC

Submitted: 05/29/2013 09:40
Reported: 06/10/2013 11:58

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82900 SDG#: PH041-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13149039401A	05/29/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13150SLL026	Sample number(s): 7073187									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	95		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	111		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	109		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	103		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	105		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	97		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	95		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	105		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	95		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	94		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	105		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	88		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	84		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	111		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	99		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	110		71-120		
Batch number: 13159SLC026	Sample number(s): 7073188-7073189									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	99		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	93		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	114		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	108		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	119		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	103		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	98		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	92		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	108		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	97		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	97		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	89		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	86		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	94		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	96		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	99		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	107		71-120		
Batch number: 13155A16A	Sample number(s): 7073187									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92		67-119		
Batch number: 13156C20A	Sample number(s): 7073185									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	108	75-135	0	30
Batch number: 131540014A	Sample number(s): 7073186-7073189									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	93		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	87		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	74		49-107		
Batch number: 131530638001	Sample number(s): 7073187-7073189									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	97		85-120		
Batch number: 131540637002	Sample number(s): 7073187-7073189									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Calcium	6.04	J	20.0	4.02	mg/kg	103		80-120		
Chromium	0.279	J	3.00	0.0880	mg/kg	109		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	105		80-120		
Iron	4.01	J	40.0	3.80	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	105		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	0.215	J	2.00	0.170	mg/kg	106		80-120		
Nickel	0.323	J	2.00	0.110	mg/kg	108		80-120		
Phosphorus	1.44	J	10.0	0.510	mg/kg	105		80-120		
Potassium	100 U		100.	13.5	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	103		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	107		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Zirconium	5.00	U	5.00	0.830	mg/kg	106		80-120		
Batch number: 131540637002A	Sample number(s): 7073187-7073189									
Silver	0.200	U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0361	J	0.400	0.0340	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	91		80-120		
Batch number: 131540637002B	Sample number(s): 7073187-7073189									
Selenium	0.400	U	0.400	0.100	mg/kg	98		80-120		
Batch number: 13149039401A	Sample number(s): 7073187-7073189									
15a pH by 9045D						100		95-105		
Batch number: 13155162402A	Sample number(s): 7073186-7073189									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13150002	Sample number(s): 7073187-7073189									
2378-TCDD	1.00	U	1.00	0.0327	ng/kg	105		67-158		
12378-PeCDD	0.0518	J	5.00	0.0307	ng/kg	100		70-142		
123478-HxCDD	5.00	U	5.00	0.0193	ng/kg	96		70-164		
123678-HxCDD	5.00	U	5.00	0.0202	ng/kg	97		76-134		
123789-HxCDD	5.00	U	5.00	0.0197	ng/kg	98		64-162		
1234678-HpCDD	0.0716	J	5.00	0.0218	ng/kg	96		70-140		
OCDD	0.237	J	10.0	0.0289	ng/kg	96		78-144		
2378-TCDF	0.0382	J	1.00	0.0322	ng/kg	107		75-158		
12378-PeCDF	0.0266	J	5.00	0.0156	ng/kg	99		80-134		
23478-PeCDF	5.00	U	5.00	0.0169	ng/kg	101		68-160		
123478-HxCDF	0.0216	J	5.00	0.0143	ng/kg	93		72-134		
123678-HxCDF	0.0344	J	5.00	0.0121	ng/kg	93		84-130		
123789-HxCDF	5.00	U	5.00	0.0153	ng/kg	97		78-130		
234678-HxCDF	0.0184	J	5.00	0.0131	ng/kg	94		70-156		
1234678-HpCDF	0.0443	J	5.00	0.00743	ng/kg	94		82-122		
1234789-HpCDF	0.0384	J	5.00	0.0139	ng/kg	97		78-138		
OCDF	0.0897	J	10.0	0.0425	ng/kg	94		63-170		
TEQ WHO 2005 - EDLx0.0	0.0000710				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13150SLL026	Sample number(s): 7073187 UNSPK: 7073187								
Acenaphthene	85	81	48-127	4	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Acenaphthylene	87	84	49-121	3	30				
Anthracene	80	77	52-126	4	30				
Benzo(a)anthracene	97	95	32-135	1	30				
Benzo(a)pyrene	98	93	36-138	5	30				
Benzo(b)fluoranthene	95	94	26-142	0	30				
Benzo(e)pyrene	93	88	70-130	5	30				
Benzo(g,h,i)perylene	85	81	33-141	4	30				
Benzo(k)fluoranthene	101	95	47-129	6	30				
Butylbenzylphthalate	84	82	59-153	2	30				
Di-n-butylphthalate	81	80	62-154	0	30				
Chrysene	93	89	29-148	4	30				
Dibenz(a,h)anthracene	91	89	34-125	2	30				
Diethylphthalate	74*	81	76-127	9	30				
Dimethylphthalate	94	91	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	69	73	39-167	4	30				
Fluoranthene	102	89	47-135	12	30				
Fluorene	90	86	50-129	3	30				
Indeno(1,2,3-cd)pyrene	90	86	17-136	4	30				
1-Methylnaphthalene	82	78	50-131	5	30				
2-Methylnaphthalene	83	76	28-144	7	30				
Naphthalene	86	81	31-148	5	30				
N-Nitrosodimethylamine	78	87	48-113	11	30				
Di-n-octylphthalate	85	83	52-162	1	30				
Phenanthrene	90	89	29-142	1	30				
Pyrene	89	83	26-143	7	30				
Batch number: 13159SLC026	Sample number(s): 7073188-7073189 UNSPK: 7073188								
Acenaphthene	83	90	48-127	7	30				
Acenaphthylene	81	87	49-121	6	30				
Anthracene	83	91	52-126	9	30				
Benzo(a)anthracene	92	103	32-135	10	30				
Benzo(a)pyrene	86	96	36-138	10	30				
Benzo(b)fluoranthene	111	110	26-142	1	30				
Benzo(e)pyrene	92	100	70-130	8	30				
Benzo(g,h,i)perylene	66	63	33-141	4	30				
Benzo(k)fluoranthene	91	97	47-129	5	30				
Butylbenzylphthalate	89	100	59-153	11	30				
Di-n-butylphthalate	91	100	62-154	10	30				
Chrysene	88	100	29-148	11	30				
Dibenz(a,h)anthracene	76	74	34-125	4	30				
Diethylphthalate	89	91	76-127	2	30				
Dimethylphthalate	89	96	62-136	7	30				
Bis(2-Ethylhexyl)phthalate	76	90	39-167	13	30				
Fluoranthene	94	104	47-135	8	30				
Fluorene	88	95	50-129	6	30				
Indeno(1,2,3-cd)pyrene	74	74	17-136	1	30				
1-Methylnaphthalene	80	87	50-131	9	30				
2-Methylnaphthalene	77	85	28-144	9	30				
Naphthalene	82	91	31-148	9	30				
N-Nitrosodimethylamine	95	107	48-113	11	30				
Di-n-octylphthalate	85	99	52-162	14	30				
Phenanthrene	83	89	29-142	6	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Pyrene	81	92	26-143	11	30				
Batch number: 13155A16A	Sample number(s): 7073187 UNSPK: P076735								
11a TPH by EPA 8015B GRO	96	110	39-118	19	30				
Batch number: 131540014A	Sample number(s): 7073186-7073189 UNSPK: 7073187								
EFH (C12-C14)	94	116	49-123	21*	20				
EFH (C15-C20)	122	158*	49-123	25*	20				
EFH (C21-C30)	84	123	49-123	19	20				
EFH (C30-C40)	11*	22*	49-123	4	20				
EFH (C8-C11)	80	120	49-123	40*	20				
Batch number: 131530638001	Sample number(s): 7073187-7073189 UNSPK: 7073187 BKG: 7073187								
3a Mercury 7471A	117	117	65-135	0	20	0.0158 U	0.0111 J	200* (1)	20
Batch number: 131540637002	Sample number(s): 7073187-7073189 UNSPK: P078552 BKG: P078552								
Aluminum	1903 (2)	1658 (2)	75-125	3	20	14,600	13,900	5	20
Antimony	60*	59*	75-125	0	20	0.756 J	0.697 J	8 (1)	20
Arsenic	98	96	75-125	1	20	4.21	4.38	4 (1)	20
Barium	98	95	75-125	2	20	98.4	96.2	2	20
Beryllium	104	100	75-125	3	20	0.588 J	0.570 J	3 (1)	20
Boron	98	96	75-125	3	20	3.22 J	2.91 J	10 (1)	20
Cadmium	95	93	75-125	3	20	0.307 J	0.274 J	11 (1)	20
Calcium	213*	183*	75-125	5	20	1,520	1,430	6	20
Chromium	119	104	75-125	7	20	20.7	21.0	1	20
Cobalt	96	92	75-125	4	20	5.78	5.49	5	20
Copper	105	100	75-125	3	20	11.4	10.8	5	20
Iron	399 (2)	-653 (2)	75-125	5	20	19,900	19,700	1	20
Lead	94	92	75-125	2	20	6.26	5.80	8 (1)	20
Lithium	102	99	75-125	2	20	18.5	17.5	5 (1)	20
Magnesium	171 (2)	69 (2)	75-125	5	20	3,920	3,850	2	20
Manganese	132 (2)	57 (2)	75-125	11	20	268	262	2	20
Molybdenum	97	94	75-125	4	20	0.771 J	0.856 J	10 (1)	20
Nickel	98	94	75-125	3	20	12.3	12.3	0	20
Phosphorus	78	60*	75-125	4	20	383	374	2	20
Potassium	128 (2)	109 (2)	75-125	4	20	3,860	3,820	1	20
Sodium	100	97	75-125	2	20	65.5 J	63.8 J	3 (1)	20
Tin	92	89	75-125	3	20	2.59 J	2.71 J	5 (1)	20
Titanium	412 (2)	364 (2)	75-125	3	20	1,080	1,040	5	20
Vanadium	112	106	75-125	3	20	34.2	33.2	3	20
Zinc	97	92	75-125	3	20	55.7	54.4	2	20
Zirconium	88	87	75-125	2	20	3.18 J	3.01 J	5 (1)	20
Batch number: 131540637002A	Sample number(s): 7073187-7073189 UNSPK: P078552 BKG: P078552								
Silver	103	103	75-125	0	20	0.0380 J	0.0241 J	45* (1)	20
Strontium	148*	129*	75-125	5	20	17.7	16.7	6	20
Thallium	112	108	75-125	2	20	0.249	0.284	13 (1)	20
Batch number: 131540637002B	Sample number(s): 7073187-7073189 UNSPK: P078552 BKG: P078552								
Selenium	94	103	75-125	9	20	0.143 J	0.0974 J	38* (1)	20

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13149039401A	Sample number(s): 7073187-7073189					BKG: 7073187			
15a pH by 9045D						6.97	6.98	0	3
Batch number: 13155162402A	Sample number(s): 7073186-7073189					BKG: P078552			
14a Moisture Content by 160.3						4.5	4.3	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13150SLL026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7073187	82	76	78
Blank	88	95	92
LCS	87	95	91
MS	83	84	87
MSD	78	81	82
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13159SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7073188	86	77	89
7073189	83	77	85
Blank	83	88	91
LCS	85	93	93
MS	83	78	87
MSD	86	82	91
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13155A16A

	Trifluorotoluene-F
7073187	86
Blank	91
LCS	89
MS	86
MSD	85

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Surrogate Quality Control

Limits: 61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13156C20A

	Trifluorotoluene-F
7073185	81
Blank	82
LCS	118
LCSD	113

Limits: 63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131540014A

	Chlorobenzene	Orthoterphenyl
7073186	107	72
7073187	88	90
7073188	99	75
7073189	89	85
Blank	99	99
LCS	91	89
MS	102	82
MSD	109	93

Limits: 37-125 66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13150002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7073187	77	93	72	78	72	72
7073188	66	78	63	72	63	54
7073189	72	89	65	73	63	57
Blank	71	78	61	72	63	59
OPR	69	79	67	74	69	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7073187	85	62	59	94	80	80
7073188	82	51	51	81	73	71
7073189	87	53	54	93	70	68
Blank	85	54	51	83	71	71
OPR	83	58	58	82	75	75
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7073187	80	77	82	79	101
7073188	70	69	77	68	89
7073189	68	68	79	72	107

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393100
Reported: 06/10/13 at 11:58 AM

Surrogate Quality Control

Blank	71	71	76	68	91
OPR	73	72	78	66	86
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1393100 7073185-89

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/28/2013
CarrierName: FedEx
AirbillNo: 799864156713

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130528-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-052813	5/28/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-830-SA5A-SB-0.0-0.5	5/28/13 10:55	SO	None	1 - SS-Sleeve	10 day																				X											
SL-830-SA5A-SB-2.75-3.75	5/28/13 11:35	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-830-SA5A-SB-2.75-3.75	5/28/13 11:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-830-SA5A-SB-2.75-3.75	5/28/13 11:35	SO	None	2 - Encore	10 day																			X												
SL-828-SA5A-SB-0.0-0.5	5/28/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-828-SA5A-SB-0.0-0.5	5/28/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-829-SA5A-SB-0.0-0.5	5/28/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-829-SA5A-SB-0.0-0.5	5/28/13 14:15	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cotton

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Signature 05/28/2013 1600											
									Patgh	5/29/2013	0940

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Environmental Sample Administration Receipt Documentation Log

1393100

Client/Project: CDM Smith

Date of Receipt: 5/29/13

Time of Receipt: 0940

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	OT131	1.3	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 5/29/13 1026

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 11, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 05/30/2013
Group Number: 1393523
SDG: PH042
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-831-SA5A-SB-0.0-0.5 Soil	7075248
SL-831-SA5A-SB-4.5-5.5 Soil	7075249
SL-832-SA5A-SB-0.0-0.5 Soil	7075250
SL-832-SA5A-SB-4.0-5.0 Soil	7075251
SL-832-SA5A-SB-7.2-8.2 Soil	7075252
SL-842-SA5A-SB-0.0-0.5 Soil	7075253
TB-052913 Water	7075254
SL-843-SA5A-SB-0.0-0.5 Soil	7075255
SL-844-SA5A-SB-0.0-0.5 Soil	7075256
EB-052913 Water	7075257

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.71	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.8		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	2.0		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.9		1.7	0.68	1
12969	Pyrene	129-00-0	1.8		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	3.2	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	19		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	36		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		39.9	7.70	1
06944	Antimony	7440-36-0	0.539	J	3.99	0.499	1
06935	Arsenic	7440-38-2	4.79		3.99	0.329	1
06946	Barium	7440-39-3	105		0.998	0.0329	1
06947	Beryllium	7440-41-7	0.639	J	0.998	0.0669	1
07914	Boron	7440-42-8	3.52	J	9.98	0.829	1
06949	Cadmium	7440-43-9	0.331	J	0.998	0.0329	1
01650	Calcium	7440-70-2	2,130		20.0	4.01	1
06951	Chromium	7440-47-3	20.2		3.00	0.0879	1
06952	Cobalt	7440-48-4	6.06		0.998	0.0899	1
06953	Copper	7440-50-8	11.1		2.00	0.180	1
01654	Iron	7439-89-6	20,000		39.9	3.79	1
06955	Lead	7439-92-1	7.58		3.00	0.469	1
01656	Lithium	7439-93-2	19.7		4.0	0.55	1

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

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,860		9.98	1.73	1
06958	Manganese	7439-96-5	343		0.998	0.0829	1
06960	Molybdenum	7439-98-7	0.748	J	2.00	0.170	1
06961	Nickel	7440-02-0	13.3		2.00	0.110	1
10145	Phosphorus	7723-14-0	370		9.98	0.509	1
01662	Potassium	7440-09-7	3,770		99.8	13.5	1
01667	Sodium	7440-23-5	65.6	J	99.8	16.7	1
06969	Tin	7440-31-5	2.74	J	9.98	0.220	1
06970	Titanium	7440-32-6	1,090		0.998	0.170	1
06971	Vanadium	7440-62-2	35.6		0.998	0.110	1
06972	Zinc	7440-66-6	55.2		3.99	0.200	1
10146	Zirconium	7440-67-7	3.62	J	4.99	0.829	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.399	U	0.399	0.0998	2
06142	Silver	7440-22-4	0.0523	J	0.200	0.0200	2
06144	Strontium	7440-24-6	21.7		0.399	0.0339	2
06145	Thallium	7440-28-0	0.261		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.28		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.124	JQ	1.00	0.0853	1
11031	12378-PeCDD	40321-76-4	1.59	JQ	5.02	0.159	1
11031	123478-HxCDD	39227-28-6	3.96	J	5.02	0.130	1
11031	123678-HxCDD	57653-85-7	25.1		5.02	0.136	1
11031	123789-HxCDD	19408-74-3	10.0		5.02	0.132	1
11031	1234678-HpCDD	35822-46-9	670	B	5.02	0.377	1
11031	OCDD	3268-87-9	5,720	EB	10.0	0.231	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.143	1
11031	12378-PeCDF	57117-41-6	1.42	JQ	5.02	0.0762	1
11031	23478-PeCDF	57117-31-4	1.25	J	5.02	0.0688	1
11031	123478-HxCDF	70648-26-9	3.12	JB	5.02	0.133	1
11031	123678-HxCDF	57117-44-9	3.43	JB	5.02	0.138	1
11031	123789-HxCDF	72918-21-9	0.898	JB	5.02	0.147	1
11031	234678-HxCDF	60851-34-5	4.30	JB	5.02	0.129	1
11031	1234678-HpCDF	67562-39-4	111	B	5.02	0.0995	1
11031	1234789-HpCDF	55673-89-7	10.4		5.02	0.131	1
11031	OCDF	39001-02-0	393	B	10.0	0.0915	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	15.2				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	100	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 05:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 18:11	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/04/2013 22:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:39	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:04	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:04	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:28	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:04	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 12:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-831-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075248
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-0 SDG#: PH042-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.18
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	3.7	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		41.4	7.98	1
06944	Antimony	7440-36-0	0.540	J	4.14	0.517	1
06935	Arsenic	7440-38-2	6.02		4.14	0.341	1
06946	Barium	7440-39-3	58.3		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.686	J	1.03	0.0693	1
07914	Boron	7440-42-8	1.51	J	10.3	0.859	1
06949	Cadmium	7440-43-9	0.154	J	1.03	0.0341	1
01650	Calcium	7440-70-2	1,820		20.7	4.16	1
06951	Chromium	7440-47-3	19.1		3.10	0.0910	1

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
06952	Cobalt	7440-48-4	6.37		1.03	0.0931	1
06953	Copper	7440-50-8	8.70		2.07	0.186	1
01654	Iron	7439-89-6	20,800		41.4	3.93	1
06955	Lead	7439-92-1	6.07		3.10	0.486	1
01656	Lithium	7439-93-2	21.9		4.1	0.57	1
01657	Magnesium	7439-95-4	4,170		10.3	1.79	1
06958	Manganese	7439-96-5	206		1.03	0.0859	1
06960	Molybdenum	7439-98-7	0.587	J	2.07	0.176	1
06961	Nickel	7440-02-0	9.43		2.07	0.114	1
10145	Phosphorus	7723-14-0	144		10.3	0.528	1
01662	Potassium	7440-09-7	1,970		103	14.0	1
01667	Sodium	7440-23-5	87.0	J	103	17.3	1
06969	Tin	7440-31-5	2.87	J	10.3	0.228	1
06970	Titanium	7440-32-6	1,150		1.03	0.176	1
06971	Vanadium	7440-62-2	39.0		1.03	0.114	1
06972	Zinc	7440-66-6	40.7		4.14	0.207	1
10146	Zirconium	7440-67-7	3.67	J	5.17	0.859	1
	SW-846 6020A		mg/kg		mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.414	U	0.414	0.103	2
06142	Silver	7440-22-4	0.0626	J	0.207	0.0207	2
06144	Strontium	7440-24-6	17.3		0.414	0.0352	2
06145	Thallium	7440-28-0	0.265		0.207	0.0310	2
	SW-846 7471B		mg/kg		mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		Std. Units		Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	6.91		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0508	1
11031	12378-PeCDD	40321-76-4	0.0744	JQ	5.02	0.0590	1
11031	123478-HxCDD	39227-28-6	0.0738	J	5.02	0.0494	1
11031	123678-HxCDD	57653-85-7	0.223	JQ	5.02	0.0542	1
11031	123789-HxCDD	19408-74-3	0.205	J	5.02	0.0521	1
11031	1234678-HpCDD	35822-46-9	4.63	JB	5.02	0.0904	1
11031	OCDD	3268-87-9	49.5	B	10.0	0.0484	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0433	1
11031	12378-PeCDF	57117-41-6	0.0564	JQ	5.02	0.0203	1
11031	23478-PeCDF	57117-31-4	0.0654	JQ	5.02	0.0193	1
11031	123478-HxCDF	70648-26-9	0.0743	JBQ	5.02	0.0257	1
11031	123678-HxCDF	57117-44-9	0.0685	JBQ	5.02	0.0249	1
11031	123789-HxCDF	72918-21-9	5.02	U	5.02	0.0316	1
11031	234678-HxCDF	60851-34-5	0.0312	JBQ	5.02	0.0286	1
11031	1234678-HpCDF	67562-39-4	1.02	JB	5.02	0.0268	1
11031	1234789-HpCDF	55673-89-7	0.0795	JQ	5.02	0.0360	1
11031	OCDF	39001-02-0	3.91	JB	10.0	0.0449	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.100				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	98	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	102	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 06:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/04/2013 21:38	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315031255	05/30/2013 21:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315031255	05/30/2013 21:38	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 18:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/04/2013 23:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:07	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:07	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:30	David K Beck	2

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

Sample Description: SL-831-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075249
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

831-4 SDG#: PH042-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:07	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.77	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.2	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.0	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.94	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.4		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	18		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		39.8	7.67	1
06944	Antimony	7440-36-0	0.526	J	3.98	0.498	1
06935	Arsenic	7440-38-2	4.28		3.98	0.328	1
06946	Barium	7440-39-3	105		0.995	0.0328	1
06947	Beryllium	7440-41-7	0.614	J	0.995	0.0667	1
07914	Boron	7440-42-8	2.72	J	9.95	0.826	1
06949	Cadmium	7440-43-9	0.306	J	0.995	0.0328	1
01650	Calcium	7440-70-2	1,850		19.9	4.00	1
06951	Chromium	7440-47-3	19.6		2.99	0.0876	1
06952	Cobalt	7440-48-4	6.02		0.995	0.0896	1
06953	Copper	7440-50-8	10.8		1.99	0.179	1
01654	Iron	7439-89-6	19,800		39.8	3.78	1
06955	Lead	7439-92-1	7.48		2.99	0.468	1
01656	Lithium	7439-93-2	18.4		4.0	0.55	1

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,740		9.95	1.72	1
06958	Manganese	7439-96-5	344		0.995	0.0826	1
06960	Molybdenum	7439-98-7	0.735	J	1.99	0.169	1
06961	Nickel	7440-02-0	12.9		1.99	0.109	1
10145	Phosphorus	7723-14-0	365		9.95	0.508	1
01662	Potassium	7440-09-7	3,710		99.5	13.4	1
01667	Sodium	7440-23-5	66.7	J	99.5	16.6	1
06969	Tin	7440-31-5	2.52	J	9.95	0.219	1
06970	Titanium	7440-32-6	974		0.995	0.169	1
06971	Vanadium	7440-62-2	33.7		0.995	0.109	1
06972	Zinc	7440-66-6	52.6		3.98	0.199	1
10146	Zirconium	7440-67-7	3.29	J	4.98	0.826	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.144	J	0.398	0.0995	2
06142	Silver	7440-22-4	0.0415	J	0.199	0.0199	2
06144	Strontium	7440-24-6	20.0		0.398	0.0338	2
06145	Thallium	7440-28-0	0.251		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0109	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.46		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.988	U	0.988	0.0442	1
11031	12378-PeCDD	40321-76-4	0.348	JQ	4.94	0.0583	1
11031	123478-HxCDD	39227-28-6	0.576	J	4.94	0.0830	1
11031	123678-HxCDD	57653-85-7	1.36	J	4.94	0.0849	1
11031	123789-HxCDD	19408-74-3	1.58	J	4.94	0.0852	1
11031	1234678-HpCDD	35822-46-9	39.6	B	4.94	0.109	1
11031	OCDD	3268-87-9	462	B	9.88	0.0680	1
11031	2378-TCDF	51207-31-9	0.0777	JQ	0.988	0.0615	1
11031	12378-PeCDF	57117-41-6	0.307	J	4.94	0.0307	1
11031	23478-PeCDF	57117-31-4	0.165	JQ	4.94	0.0298	1
11031	123478-HxCDF	70648-26-9	0.329	JB	4.94	0.0685	1
11031	123678-HxCDF	57117-44-9	0.502	JBQ	4.94	0.0691	1
11031	123789-HxCDF	72918-21-9	0.249	JB	4.94	0.0779	1
11031	234678-HxCDF	60851-34-5	0.489	JB	4.94	0.0673	1
11031	1234678-HpCDF	67562-39-4	10.4	B	4.94	0.0470	1
11031	1234789-HpCDF	55673-89-7	0.946	J	4.94	0.0652	1
11031	OCDF	39001-02-0	39.8	B	9.88	0.0449	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.13				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	99	24 - 185
13C12-23478-PeCDF	97	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 06:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 18:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 00:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:47	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:09	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:09	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:09	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-832-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075250
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 09:50 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-0 SDG#: PH042-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.46	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.56
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.8		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	15		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,700		40.6	7.83	1
06944	Antimony	7440-36-0	0.610	J	4.06	0.508	1
06935	Arsenic	7440-38-2	5.20		4.06	0.335	1
06946	Barium	7440-39-3	91.4		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.701	J	1.02	0.0681	1
07914	Boron	7440-42-8	2.52	J	10.2	0.843	1
06949	Cadmium	7440-43-9	0.214	J	1.02	0.0335	1
01650	Calcium	7440-70-2	2,160		20.3	4.08	1
06951	Chromium	7440-47-3	21.4		3.05	0.0894	1

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.22		1.02	0.0914	1
06953	Copper	7440-50-8	10.2		2.03	0.183	1
01654	Iron	7439-89-6	21,100		40.6	3.86	1
06955	Lead	7439-92-1	6.58		3.05	0.477	1
01656	Lithium	7439-93-2	22.9		4.1	0.56	1
01657	Magnesium	7439-95-4	4,170		10.2	1.76	1
06958	Manganese	7439-96-5	287		1.02	0.0843	1
06960	Molybdenum	7439-98-7	0.752	J	2.03	0.173	1
06961	Nickel	7440-02-0	12.5		2.03	0.112	1
10145	Phosphorus	7723-14-0	242		10.2	0.518	1
01662	Potassium	7440-09-7	2,630		102	13.7	1
01667	Sodium	7440-23-5	86.7	J	102	17.0	1
06969	Tin	7440-31-5	2.83	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,100		1.02	0.173	1
06971	Vanadium	7440-62-2	37.0		1.02	0.112	1
06972	Zinc	7440-66-6	48.4		4.06	0.203	1
10146	Zirconium	7440-67-7	3.95	J	5.08	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.406	U	0.406	0.102	2
06142	Silver	7440-22-4	0.0350	J	0.203	0.0203	2
06144	Strontium	7440-24-6	23.2		0.406	0.0345	2
06145	Thallium	7440-28-0	0.228		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0102	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.75		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0356	1
11031	12378-PeCDD	40321-76-4	5.08	U	5.08	0.0378	1
11031	123478-HxCDD	39227-28-6	0.141	JQ	5.08	0.0469	1
11031	123678-HxCDD	57653-85-7	0.366	JQ	5.08	0.0501	1
11031	123789-HxCDD	19408-74-3	0.400	JQ	5.08	0.0476	1
11031	1234678-HpCDD	35822-46-9	7.59	B	5.08	0.0729	1
11031	OCDD	3268-87-9	84.3	B	10.2	0.0516	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0341	1
11031	12378-PeCDF	57117-41-6	0.0742	JQ	5.08	0.0213	1
11031	23478-PeCDF	57117-31-4	0.0575	JQ	5.08	0.0195	1
11031	123478-HxCDF	70648-26-9	0.0797	JBQ	5.08	0.0413	1
11031	123678-HxCDF	57117-44-9	0.123	JB	5.08	0.0382	1
11031	123789-HxCDF	72918-21-9	0.125	JBQ	5.08	0.0438	1
11031	234678-HxCDF	60851-34-5	0.175	JB	5.08	0.0375	1
11031	1234678-HpCDF	67562-39-4	2.10	JB	5.08	0.0263	1
11031	1234789-HpCDF	55673-89-7	0.237	J	5.08	0.0386	1
11031	OCDF	39001-02-0	6.79	JB	10.2	0.0427	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.156				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 07:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/04/2013 22:16	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315031255	05/30/2013 21:39	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315031255	05/30/2013 21:40	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 19:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 01:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:51	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:11	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:11	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:34	David K Beck	2

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

Sample Description: SL-832-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075251
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:30 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-4 SDG#: PH042-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:11	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.29
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		40.5	7.80	1
06944	Antimony	7440-36-0	0.753	J	4.05	0.506	1
06935	Arsenic	7440-38-2	5.75		4.05	0.334	1
06946	Barium	7440-39-3	60.7		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.607	J	1.01	0.0678	1
07914	Boron	7440-42-8	1.61	J	10.1	0.839	1
06949	Cadmium	7440-43-9	0.143	J	1.01	0.0334	1
01650	Calcium	7440-70-2	1,850		20.2	4.07	1
06951	Chromium	7440-47-3	19.1		3.03	0.0890	1

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.39		1.01	0.0910	1
06953	Copper	7440-50-8	8.51		2.02	0.182	1
01654	Iron	7439-89-6	20,200		40.5	3.84	1
06955	Lead	7439-92-1	5.47		3.03	0.475	1
01656	Lithium	7439-93-2	23.0		4.0	0.56	1
01657	Magnesium	7439-95-4	4,170		10.1	1.75	1
06958	Manganese	7439-96-5	170		1.01	0.0839	1
06960	Molybdenum	7439-98-7	0.494	J	2.02	0.172	1
06961	Nickel	7440-02-0	9.21		2.02	0.111	1
10145	Phosphorus	7723-14-0	121		10.1	0.516	1
01662	Potassium	7440-09-7	1,890		101	13.7	1
01667	Sodium	7440-23-5	94.3	J	101	16.9	1
06969	Tin	7440-31-5	2.81	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,140		1.01	0.172	1
06971	Vanadium	7440-62-2	36.1		1.01	0.111	1
06972	Zinc	7440-66-6	40.9		4.05	0.202	1
10146	Zirconium	7440-67-7	3.50	J	5.06	0.839	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.0581	J	0.202	0.0202	2
06144	Strontium	7440-24-6	17.2		0.405	0.0344	2
06145	Thallium	7440-28-0	0.239		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.24		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0408	1
11031	12378-PeCDD	40321-76-4	5.14	U	5.14	0.0411	1
11031	123478-HxCDD	39227-28-6	5.14	U	5.14	0.0256	1
11031	123678-HxCDD	57653-85-7	5.14	U	5.14	0.0284	1
11031	123789-HxCDD	19408-74-3	0.0527	JQ	5.14	0.0271	1
11031	1234678-HpCDD	35822-46-9	0.128	JBQ	5.14	0.0313	1
11031	OCDD	3268-87-9	0.440	JB	10.3	0.0401	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0350	1
11031	12378-PeCDF	57117-41-6	0.0317	JQ	5.14	0.0200	1
11031	23478-PeCDF	57117-31-4	5.14	U	5.14	0.0190	1
11031	123478-HxCDF	70648-26-9	0.0278	JBQ	5.14	0.0127	1
11031	123678-HxCDF	57117-44-9	0.0246	JBQ	5.14	0.0124	1
11031	123789-HxCDF	72918-21-9	0.0196	JBQ	5.14	0.0149	1
11031	234678-HxCDF	60851-34-5	0.0197	JBQ	5.14	0.0130	1
11031	1234678-HpCDF	67562-39-4	0.0367	JBQ	5.14	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.0204	JQ	5.14	0.0161	1
11031	OCDF	39001-02-0	0.0854	JB	10.3	0.0359	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000158				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 07:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/04/2013 22:54	Laura M Krieger	27.29
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315031255	05/30/2013 21:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315031255	05/30/2013 21:41	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 19:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 05:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:54	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:14	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:14	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:35	David K Beck	2

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

Sample Description: SL-832-SA5A-SB-7.2-8.2 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075252
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 10:35 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

832-7 SDG#: PH042-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:14	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:09	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.47	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.83	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.90	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.6		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.79	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.4		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	3.9		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	3.5		1.7	0.67	1
12969	Pyrene	129-00-0	5.5		1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.8		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	17		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		39.6	7.64	1
06944	Antimony	7440-36-0	0.539	J	3.96	0.495	1
06935	Arsenic	7440-38-2	4.67		3.96	0.327	1
06946	Barium	7440-39-3	100		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.603	J	0.990	0.0663	1
07914	Boron	7440-42-8	2.63	J	9.90	0.822	1
06949	Cadmium	7440-43-9	0.308	J	0.990	0.0327	1
01650	Calcium	7440-70-2	2,160		19.8	3.98	1
06951	Chromium	7440-47-3	19.2		2.97	0.0871	1
06952	Cobalt	7440-48-4	5.61		0.990	0.0891	1
06953	Copper	7440-50-8	10.5		1.98	0.178	1
01654	Iron	7439-89-6	18,700		39.6	3.76	1
06955	Lead	7439-92-1	9.37		2.97	0.465	1
01656	Lithium	7439-93-2	18.5		4.0	0.54	1

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,630		9.90	1.71	1
06958	Manganese	7439-96-5	311		0.990	0.0822	1
06960	Molybdenum	7439-98-7	0.685	J	1.98	0.168	1
06961	Nickel	7440-02-0	12.3		1.98	0.109	1
10145	Phosphorus	7723-14-0	327		9.90	0.505	1
01662	Potassium	7440-09-7	3,440		99.0	13.4	1
01667	Sodium	7440-23-5	63.4	J	99.0	16.5	1
06969	Tin	7440-31-5	2.71	J	9.90	0.218	1
06970	Titanium	7440-32-6	1,020		0.990	0.168	1
06971	Vanadium	7440-62-2	33.3		0.990	0.109	1
06972	Zinc	7440-66-6	56.1		3.96	0.198	1
10146	Zirconium	7440-67-7	3.42	J	4.95	0.822	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.102	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0605	J	0.198	0.0198	2
06144	Strontium	7440-24-6	22.0		0.396	0.0337	2
06145	Thallium	7440-28-0	0.235		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0132	J	0.0156	0.0093	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.45		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.153 J	0.963	0.0472	1
11031	12378-PeCDD	40321-76-4	2.26 J	4.81	0.113	1
11031	123478-HxCDD	39227-28-6	7.66	4.81	0.0966	1
11031	123678-HxCDD	57653-85-7	19.2	4.81	0.107	1
11031	123789-HxCDD	19408-74-3	17.2	4.81	0.105	1
11031	1234678-HpCDD	35822-46-9	1,020 B	4.81	0.403	1
11031	OCDD	3268-87-9	13,500 EB	9.63	0.207	1
11031	2378-TCDF	51207-31-9	0.209 JQ	0.963	0.0864	1
11031	12378-PeCDF	57117-41-6	0.597 J	4.81	0.0505	1
11031	23478-PeCDF	57117-31-4	0.653 J	4.81	0.0467	1
11031	123478-HxCDF	70648-26-9	6.62 B	4.81	0.127	1
11031	123678-HxCDF	57117-44-9	7.65 B	4.81	0.123	1
11031	123789-HxCDF	72918-21-9	0.915 JB	4.81	0.143	1
11031	234678-HxCDF	60851-34-5	7.89 B	4.81	0.124	1
11031	1234678-HpCDF	67562-39-4	275 B	4.81	0.138	1
11031	1234789-HpCDF	55673-89-7	30.1	4.81	0.192	1
11031	OCDF	39001-02-0	1,650 B	9.63	0.0991	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	27.2			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	98	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	108	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	91	28 - 143

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Labeled Compounds

	%Rec	Windows
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	90	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 08:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 20:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 06:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:58	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:16	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:37	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:16	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-842-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075253
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 11:05 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

842-0 SDG#: PH042-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: TB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075254
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 08:00

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB529 SDG#: PH042-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13156C20A	06/06/2013 14:46	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13156C20A	06/06/2013 14:46	Laura M Krieger	1

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

Sample Description: SL-843-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075255
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 14:25 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-0 SDG#: PH042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	2.1	0.10	0.10	1

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

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

Sample Description: SL-843-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075255
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 14:25 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-0 SDG#: PH042-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.167	JQ	1.01	0.0644	1
11031	12378-PeCDD	40321-76-4	0.346	JQ	5.07	0.0623	1
11031	123478-HxCDD	39227-28-6	0.220	J	5.07	0.0596	1
11031	123678-HxCDD	57653-85-7	0.443	J	5.07	0.0635	1
11031	123789-HxCDD	19408-74-3	0.365	J	5.07	0.0631	1
11031	1234678-HpCDD	35822-46-9	10.6	B	5.07	0.0915	1
11031	OCDD	3268-87-9	120	B	10.1	0.0853	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0547	1
11031	12378-PeCDF	57117-41-6	0.408	J	5.07	0.0307	1
11031	23478-PeCDF	57117-31-4	0.241	J	5.07	0.0305	1
11031	123478-HxCDF	70648-26-9	0.499	JBQ	5.07	0.0565	1
11031	123678-HxCDF	57117-44-9	0.269	JBQ	5.07	0.0566	1
11031	123789-HxCDF	72918-21-9	0.107	JBQ	5.07	0.0730	1
11031	234678-HxCDF	60851-34-5	0.205	JB	5.07	0.0603	1
11031	1234678-HpCDF	67562-39-4	2.32	JB	5.07	0.0487	1
11031	1234789-HpCDF	55673-89-7	0.376	J	5.07	0.0677	1
11031	OCDF	39001-02-0	11.1	B	10.1	0.0616	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.380				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	39	25 - 164
13C12-12378-PeCDD	56	25 - 181
13C12-123478-HxCDD	50	32 - 141
13C12-123678-HxCDD	51	28 - 130
13C12-123789-HxCDD	48	28 - 130
13C12-1234678-HpCDD	54	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	55	26 - 123
13C12-234678-HxCDF	50	28 - 136
13C12-123789-HxCDF	46	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-843-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075255
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 14:25 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-0 SDG#: PH042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-843-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075255
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 14:25 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

843-0 SDG#: PH042-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 07:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.48	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.6	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		39.3	7.58	1
06944	Antimony	7440-36-0	0.621	J	3.93	0.492	1
06935	Arsenic	7440-38-2	4.75		3.93	0.324	1
06946	Barium	7440-39-3	79.7		0.983	0.0324	1
06947	Beryllium	7440-41-7	0.611	J	0.983	0.0659	1
07914	Boron	7440-42-8	2.28	J	9.83	0.816	1
06949	Cadmium	7440-43-9	0.182	J	0.983	0.0324	1
01650	Calcium	7440-70-2	1,640		19.7	3.95	1
06951	Chromium	7440-47-3	18.1		2.95	0.0865	1
06952	Cobalt	7440-48-4	5.04		0.983	0.0885	1
06953	Copper	7440-50-8	7.84		1.97	0.177	1
01654	Iron	7439-89-6	17,900		39.3	3.74	1
06955	Lead	7439-92-1	5.90		2.95	0.462	1
01656	Lithium	7439-93-2	18.3		3.9	0.54	1

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,350		9.83	1.70	1
06958	Manganese	7439-96-5	258		0.983	0.0816	1
06960	Molybdenum	7439-98-7	0.603	J	1.97	0.167	1
06961	Nickel	7440-02-0	10.6		1.97	0.108	1
10145	Phosphorus	7723-14-0	222		9.83	0.501	1
01662	Potassium	7440-09-7	2,320		98.3	13.3	1
01667	Sodium	7440-23-5	61.9	J	98.3	16.4	1
06969	Tin	7440-31-5	2.49	J	9.83	0.216	1
06970	Titanium	7440-32-6	921		0.983	0.167	1
06971	Vanadium	7440-62-2	32.0		0.983	0.108	1
06972	Zinc	7440-66-6	41.2		3.93	0.197	1
10146	Zirconium	7440-67-7	3.40	J	4.92	0.816	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.393	U	0.393	0.0983	2
06142	Silver	7440-22-4	0.0479	J	0.197	0.0197	2
06144	Strontium	7440-24-6	16.1		0.393	0.0334	2
06145	Thallium	7440-28-0	0.203		0.197	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.14		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	2378-TCDD		1746-01-6	0.0459	JQ	1.01	0.0455	1
11031	12378-PeCDD		40321-76-4	0.231	JQ	5.07	0.0589	1
11031	123478-HxCDD		39227-28-6	0.264	JQ	5.07	0.0607	1
11031	123678-HxCDD		57653-85-7	0.355	J	5.07	0.0673	1
11031	123789-HxCDD		19408-74-3	0.448	JQ	5.07	0.0638	1
11031	1234678-HpCDD		35822-46-9	5.06	JB	5.07	0.0939	1
11031	OCDD		3268-87-9	57.8	B	10.1	0.0598	1
11031	2378-TCDF		51207-31-9	0.0514	JQ	1.01	0.0495	1
11031	12378-PeCDF		57117-41-6	0.380	J	5.07	0.0330	1
11031	23478-PeCDF		57117-31-4	0.235	JQ	5.07	0.0303	1
11031	123478-HxCDF		70648-26-9	0.251	JBQ	5.07	0.0701	1
11031	123678-HxCDF		57117-44-9	0.297	JB	5.07	0.0674	1
11031	123789-HxCDF		72918-21-9	0.124	JB	5.07	0.0774	1
11031	234678-HxCDF		60851-34-5	0.189	JBQ	5.07	0.0703	1
11031	1234678-HpCDF		67562-39-4	1.52	JB	5.07	0.0684	1
11031	1234789-HpCDF		55673-89-7	0.218	JQ	5.07	0.101	1
11031	OCDF		39001-02-0	4.69	JB	10.1	0.0520	1
Toxic Equivalents	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	0.174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 08:53	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540014A	06/04/2013 20:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131540014A	06/03/2013 18:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 08:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:02	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:18	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:18	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:39	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:18	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131530638001	06/04/2013 13:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1

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

Sample Description: SL-844-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7075256
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 13:45 by VC

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

844-0 SDG#: PH042-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131530638001	06/03/2013 14:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13150039401A	05/30/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401A	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.055	U	0.055	0.011	1
12971	Acenaphthylene	208-96-8	0.055	U	0.055	0.011	1
12971	Anthracene	120-12-7	0.055	U	0.055	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.055	U	0.055	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.055	U	0.055	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.055	U	0.055	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.055	U	0.055	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.055	U	0.055	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.055	U	0.055	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.055	1
12971	Di-n-butylphthalate	84-74-2	0.17	J	1.1	0.055	1
12971	Chrysene	218-01-9	0.055	U	0.055	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.055	U	0.055	0.011	1
12971	Diethylphthalate	84-66-2	0.27	J	1.1	0.055	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.055	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.094	J	1.1	0.055	1
12971	Fluoranthene	206-44-0	0.055	U	0.055	0.011	1
12971	Fluorene	86-73-7	0.055	U	0.055	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.055	U	0.055	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.055	U	0.055	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.055	U	0.055	0.011	1
12971	Naphthalene	91-20-3	0.033	J	0.055	0.033	1
12971	N-Nitrosodimethylamine	62-75-9	0.055	U	0.055	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.055	1
12971	Phenanthrene	85-01-8	0.055	U	0.055	0.033	1
12971	Pyrene	129-00-0	0.055	U	0.055	0.011	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C15-C20)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C21-C30)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.098	1
10365	EFH (C8-C11)	n.a.	0.098	U	0.098	0.049	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
08014	Boron	7440-42-8	0.100 U	0.100	0.0083	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.0718 J	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0013 J	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0049 J	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b. pH (9040B and 9040C)	n.a.	5.3	0.010	0.010	1

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.137	JBQ	1.99	0.133	1
10915	12378-PeCDD	40321-76-4	0.283	JBQ	9.93	0.118	1
10915	123478-HxCDD	39227-28-6	0.163	JBQ	9.93	0.0841	1
10915	123678-HxCDD	57653-85-7	0.131	JBQ	9.93	0.0882	1
10915	123789-HxCDD	19408-74-3	0.163	JBQ	9.93	0.0895	1
10915	1234678-HpCDD	35822-46-9	0.402	JB	9.93	0.0813	1
10915	OCDD	3268-87-9	0.689	JB	19.9	0.0997	1
10915	2378-TCDF	51207-31-9	1.99	U	1.99	0.0905	1
10915	12378-PeCDF	57117-41-6	0.463	JBQ	9.93	0.0724	1
10915	23478-PeCDF	57117-31-4	0.232	JB	9.93	0.0698	1
10915	123478-HxCDF	70648-26-9	0.145	JB	9.93	0.0683	1
10915	123678-HxCDF	57117-44-9	9.93	U	9.93	0.0682	1
10915	123789-HxCDF	72918-21-9	0.116	JBQ	9.93	0.0692	1
10915	234678-HxCDF	60851-34-5	0.220	JBQ	9.93	0.0628	1
10915	1234678-HpCDF	67562-39-4	0.358	JBQ	9.93	0.0431	1
10915	1234789-HpCDF	55673-89-7	0.237	JB	9.93	0.0499	1
10915	OCDF	39001-02-0	0.687	JBQ	19.9	0.144	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0906				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	86	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155WAC026	06/10/2013 17:55	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13155WAC026	06/04/2013 18:45	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13156C20A	06/06/2013 15:08	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13156C20A	06/06/2013 15:08	Laura M Krieger	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540033A	06/04/2013 22:33	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131540033A	06/04/2013 10:00	Olivia Arosemena	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13155003	06/07/2013 07:19	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13155003	06/05/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07044	Antimony	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07035	Arsenic	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07046	Barium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07047	Beryllium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
08014	Boron	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07049	Cadmium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01750	Calcium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07051	Chromium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07052	Cobalt	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07053	Copper	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01754	Iron	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07055	Lead	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01756	Lithium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01757	Magnesium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07058	Manganese	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07061	Nickel	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01762	Potassium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
01767	Sodium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07069	Tin	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07070	Titanium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07071	Vanadium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
07072	Zinc	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
10144	Zirconium	SW-846 6010C	1	131560635001	06/06/2013 19:00	John P Hook	1
06041	Selenium	SW-846 6020A	1	131560639001B	06/11/2013 04:37	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131560639001A	06/11/2013 04:37	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131560639001A	06/11/2013 04:37	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131560639001A	06/11/2013 04:37	Choon Y Tian	1

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

Sample Description: EB-052913 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7075257
LLI Group # 1393523
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/29/2013 15:00 by PH

Submitted: 05/30/2013 09:45
Reported: 06/11/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB529 SDG#: PH042-10EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	3b Mercury 7470A	SW-846 7470A	1	131515713007	06/01/2013 14:04	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131560635001	06/06/2013 07:17	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131560639001	06/06/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131515713007	05/31/2013 16:45	Nelli S Markaryan	1
12152	28b. pH (9040B and 9040C)	SW-846 9040C	1	13150121521A	05/30/2013 19:15	Luz M Groff	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13155SLE026	Sample number(s): 7075248-7075253,7075256									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	92		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	93		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	100		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	90		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	88		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	99		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	90		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	88		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	86		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	94		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	94		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	94		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	91		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13155WAC026	Sample number(s): 7075257									
Acenaphthene	0.050	U	0.050	0.010	ug/l	102	98	65-124	4	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	103	100	72-113	3	30
Anthracene	0.050	U	0.050	0.010	ug/l	104	101	70-117	3	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	102	101	75-115	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	99	72-120	5	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	106	74-130	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	99	95	70-130	4	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	105	97	63-121	7	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	107	101	74-118	6	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	91	91	40-138	0	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	104	100	70-145	4	30
Chrysene	0.050	U	0.050	0.010	ug/l	101	98	75-112	4	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	97	91	66-122	6	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	103	101	74-129	2	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	101	99	40-119	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.17	J	1.0	0.050	ug/l	75	73	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	102	99	73-116	3	30
Fluorene	0.050	U	0.050	0.010	ug/l	103	98	74-115	5	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	100	92	66-122	8	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	115	109	71-120	5	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	118	113	74-119	5	30
Naphthalene	0.050	U	0.050	0.030	ug/l	103	98	67-118	5	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	67	65	36-120	4	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	67	60	57-145	12	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	99	96	72-109	3	30
Pyrene	0.050	U	0.050	0.010	ug/l	103	104	71-116	1	30
Batch number: 13155A16A	Sample number(s): 7075249,7075251-7075252									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92		67-119		
Batch number: 13156C20A	Sample number(s): 7075254,7075257									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	108	75-135	0	30
Batch number: 131540014A	Sample number(s): 7075248-7075253,7075256									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	93		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	102		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	97		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	87		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	74		49-107		
Batch number: 131540033A	Sample number(s): 7075257									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	93	93	70-130	0	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	98	101	70-130	3	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	100	102	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	96	98	70-130	2	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	72	72	70-130	0	30
Batch number: 131515713007	Sample number(s): 7075257									
3b Mercury 7470A	0.00020	U	0.00020	0.00007 0	mg/l	96	94	90-115	2	20
Batch number: 131530638001	Sample number(s): 7075248-7075253,7075256									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	97		85-120		
Batch number: 131540637002	Sample number(s): 7075248-7075253,7075256									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Calcium	6.04	J	20.0	4.02	mg/kg	103		80-120		
Chromium	0.279	J	3.00	0.0880	mg/kg	109		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	105		80-120		
Iron	4.01	J	40.0	3.80	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	105		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Molybdenum	0.215	J	2.00	0.170	mg/kg	106		80-120		
Nickel	0.323	J	2.00	0.110	mg/kg	108		80-120		
Phosphorus	1.44	J	10.0	0.510	mg/kg	105		80-120		
Potassium	100	U	100.	13.5	mg/kg	102		80-120		
Sodium	100	U	100.	16.7	mg/kg	103		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	107		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	106		80-120		
Batch number: 131540637002A	Sample number(s): 7075248-7075253,7075256									
Silver	0.200	U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0361	J	0.400	0.0340	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	91		80-120		
Batch number: 131540637002B	Sample number(s): 7075248-7075253,7075256									
Selenium	0.400	U	0.400	0.100	mg/kg	98		80-120		
Batch number: 131560635001	Sample number(s): 7075257									
Aluminum	0.400	U	0.400	0.0743	mg/l	101	100	90-112	1	20
Antimony	0.0037	J	0.0400	0.0035	mg/l	101	103	88-111	2	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	98	97	90-113	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	98	99	88-110	1	20
Boron	0.100	U	0.100	0.0083	mg/l	96	97	89-110	0	20
Cadmium	0.0100	U	0.0100	0.00036	mg/l	100	100	90-112	1	20
Calcium	0.0711	J	0.400	0.0640	mg/l	102	102	90-110	0	20
Chromium	0.0300	U	0.0300	0.0011	mg/l	99	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.00066	mg/l	101	102	90-110	1	20
Copper	0.0200	U	0.0200	0.0021	mg/l	96	97	90-112	2	20
Iron	0.400	U	0.400	0.0333	mg/l	97	98	90-112	0	20
Lead	0.0300	U	0.0300	0.0051	mg/l	104	105	88-110	1	20
Lithium	0.0400	U	0.0400	0.0060	mg/l	101	101	90-110	0	20
Magnesium	0.200	U	0.200	0.0606	mg/l	99	100	90-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	100	100	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0029	mg/l	101	102	90-110	1	20
Nickel	0.0200	U	0.0200	0.0011	mg/l	102	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0052	mg/l	99	100	90-110	1	20
Potassium	1.00	U	1.00	0.145	mg/l	99	99	85-115	0	20
Sodium	2.00	U	2.00	0.167	mg/l	98	98	87-114	1	20
Tin	0.0400	U	0.0400	0.0022	mg/l	98	99	90-110	1	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	101	102	90-113	1	20
Vanadium	0.0100	U	0.0100	0.0013	mg/l	101	101	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	100	101	90-110	1	20
Zirconium	0.100	U	0.100	0.0092	mg/l	100	101	90-110	0	20
Batch number: 131560639001A	Sample number(s): 7075257									
Silver	0.0010	U	0.0010	0.00010	mg/l	101	99	90-115	1	20
Strontium	0.0020	U	0.0020	0.00022	mg/l	101	99	80-120	2	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	101	102	80-120	1	20
Batch number: 131560639001B	Sample number(s): 7075257									
Selenium	0.0040	U	0.0040	0.00050	mg/l	102	102	80-120	0	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13150039401A	Sample number(s): 7075248-7075253,7075256								
15a pH by 9045D					100		95-105		
Batch number: 13150121521A	Sample number(s): 7075257								
28b. pH (9040B and 9040C)					100	100	99-103	0	3
Batch number: 13155162401A	Sample number(s): 7075248-7075253,7075255-7075256								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13154001	Sample number(s): 7075248-7075253,7075255-7075256								
2378-TCDD	1.00 U	1.00	0.0476	ng/kg	106		67-158		
12378-PeCDD	5.00 U	5.00	0.0433	ng/kg	99		70-142		
123478-HxCDD	5.00 U	5.00	0.0252	ng/kg	96		70-164		
123678-HxCDD	5.00 U	5.00	0.0278	ng/kg	96		76-134		
123789-HxCDD	5.00 U	5.00	0.0274	ng/kg	99		64-162		
1234678-HpCDD	0.0620 J	5.00	0.0313	ng/kg	94		70-140		
OCDD	0.267 J	10.0	0.0380	ng/kg	92		78-144		
2378-TCDF	1.00 U	1.00	0.0504	ng/kg	104		75-158		
12378-PeCDF	5.00 U	5.00	0.0231	ng/kg	99		80-134		
23478-PeCDF	5.00 U	5.00	0.0216	ng/kg	98		68-160		
123478-HxCDF	0.0303 J	5.00	0.0175	ng/kg	93		72-134		
123678-HxCDF	0.0202 J	5.00	0.0160	ng/kg	92		84-130		
123789-HxCDF	0.0236 J	5.00	0.0184	ng/kg	91		78-130		
234678-HxCDF	0.0317 J	5.00	0.0158	ng/kg	95		70-156		
1234678-HpCDF	0.0289 J	5.00	0.00958	ng/kg	89		82-122		
1234789-HpCDF	5.00 U	5.00	0.0151	ng/kg	93		78-138		
OCDF	0.0812 J	10.0	0.0450	ng/kg	90		63-170		
Batch number: 13155003	Sample number(s): 7075257								
2378-TCDD	0.133 J	2.00	0.127	pg/l	92		60-150		
12378-PeCDD	0.271 J	10.0	0.108	pg/l	95		60-150		
123478-HxCDD	0.226 J	10.0	0.0965	pg/l	101		60-150		
123678-HxCDD	0.224 J	10.0	0.102	pg/l	98		60-150		
123789-HxCDD	0.103 J	10.0	0.0986	pg/l	99		60-150		
1234678-HpCDD	0.337 J	10.0	0.110	pg/l	97		60-150		
OCDD	0.859 J	20.0	0.0862	pg/l	98		60-150		
2378-TCDF	2.00 U	2.00	0.0983	pg/l	94		60-150		
12378-PeCDF	0.516 J	10.0	0.0791	pg/l	99		60-150		
23478-PeCDF	0.268 J	10.0	0.0743	pg/l	99		60-150		
123478-HxCDF	0.339 J	10.0	0.0697	pg/l	103		60-150		
123678-HxCDF	0.205 J	10.0	0.0686	pg/l	100		60-150		
123789-HxCDF	0.297 J	10.0	0.0716	pg/l	100		60-150		
234678-HxCDF	0.203 J	10.0	0.0669	pg/l	101		60-150		
1234678-HpCDF	0.359 J	10.0	0.0442	pg/l	102		60-150		
1234789-HpCDF	0.195 J	10.0	0.0533	pg/l	100		60-150		
OCDF	0.843 J	20.0	0.132	pg/l	96		60-150		
Batch number: 13154001	Sample number(s): 7075248-7075253,7075255-7075256								
TEQ WHO 2005 - EDLx0.0	0.000393			ng/kg					
Batch number: 13155003	Sample number(s): 7075257								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
TEQ WHO 2005 - EDLx0.0	0.0300			pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13155SLE026	Sample number(s): 7075248-7075253,7075256 UNSPK: P076735								
Acenaphthene	81	88	48-127	8	30				
Acenaphthylene	80	87	49-121	8	30				
Anthracene	79	91	52-126	15	30				
Benzo(a)anthracene	84	105	32-135	23	30				
Benzo(a)pyrene	83	105	36-138	23	30				
Benzo(b)fluoranthene	105	136	26-142	25	30				
Benzo(e)pyrene	76	96	70-130	23	30				
Benzo(g,h,i)perylene	62	75	33-141	18	30				
Benzo(k)fluoranthene	80	105	47-129	27	30				
Butylbenzylphthalate	74	87	59-153	16	30				
Di-n-butylphthalate	77	93	62-154	18	30				
Chrysene	82	101	29-148	21	30				
Dibenz(a,h)anthracene	71	87	34-125	20	30				
Diethylphthalate	85	166*	76-127	65*	30				
Dimethylphthalate	88	100	62-136	12	30				
Bis(2-Ethylhexyl)phthalate	-5*	14*	39-167	23	30				
Fluoranthene	84	104	47-135	21	30				
Fluorene	83	95	50-129	14	30				
Indeno(1,2,3-cd)pyrene	69	85	17-136	20	30				
1-Methylnaphthalene	79	87	50-131	9	30				
2-Methylnaphthalene	78	85	28-144	9	30				
Naphthalene	87	91	31-148	5	30				
N-Nitrosodimethylamine	94	94	48-113	0	30				
Di-n-octylphthalate	80	121	52-162	41*	30				
Phenanthrene	76	90	29-142	16	30				
Pyrene	78	91	26-143	15	30				
Batch number: 13155A16A	Sample number(s): 7075249,7075251-7075252 UNSPK: P076735								
11a TPH by EPA 8015B GRO	96	110	39-118	19	30				
Batch number: 131540014A	Sample number(s): 7075248-7075253,7075256 UNSPK: P073187								
EFH (C12-C14)	94	116	49-123	21*	20				
EFH (C15-C20)	122	158*	49-123	25*	20				
EFH (C21-C30)	84	123	49-123	19	20				
EFH (C30-C40)	11*	22*	49-123	4	20				
EFH (C8-C11)	80	120	49-123	40*	20				
Batch number: 131530638001	Sample number(s): 7075248-7075253,7075256 UNSPK: P073187 BKG: P073187								
3a Mercury 7471A	117	117	65-135	0	20	0.0158 U	0.0111 J	200* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131540637002	Sample number(s): 7075248-7075253,7075256 UNSPK: P078552 BKG: P078552								
Aluminum	1903 (2)	1658 (2)	75-125	3	20	14,600	13,900	5	20
Antimony	60*	59*	75-125	0	20	0.756 J	0.697 J	8 (1)	20
Arsenic	98	96	75-125	1	20	4.21	4.38	4 (1)	20
Barium	98	95	75-125	2	20	98.4	96.2	2	20
Beryllium	104	100	75-125	3	20	0.588 J	0.570 J	3 (1)	20
Boron	98	96	75-125	3	20	3.22 J	2.91 J	10 (1)	20
Cadmium	95	93	75-125	3	20	0.307 J	0.274 J	11 (1)	20
Calcium	213*	183*	75-125	5	20	1,520	1,430	6	20
Chromium	119	104	75-125	7	20	20.7	21.0	1	20
Cobalt	96	92	75-125	4	20	5.78	5.49	5	20
Copper	105	100	75-125	3	20	11.4	10.8	5	20
Iron	399 (2)	-653 (2)	75-125	5	20	19,900	19,700	1	20
Lead	94	92	75-125	2	20	6.26	5.80	8 (1)	20
Lithium	102	99	75-125	2	20	18.5	17.5	5 (1)	20
Magnesium	171 (2)	69 (2)	75-125	5	20	3,920	3,850	2	20
Manganese	132 (2)	57 (2)	75-125	11	20	268	262	2	20
Molybdenum	97	94	75-125	4	20	0.771 J	0.856 J	10 (1)	20
Nickel	98	94	75-125	3	20	12.3	12.3	0	20
Phosphorus	78	60*	75-125	4	20	383	374	2	20
Potassium	128 (2)	109 (2)	75-125	4	20	3,860	3,820	1	20
Sodium	100	97	75-125	2	20	65.5 J	63.8 J	3 (1)	20
Tin	92	89	75-125	3	20	2.59 J	2.71 J	5 (1)	20
Titanium	412 (2)	364 (2)	75-125	3	20	1,080	1,040	5	20
Vanadium	112	106	75-125	3	20	34.2	33.2	3	20
Zinc	97	92	75-125	3	20	55.7	54.4	2	20
Zirconium	88	87	75-125	2	20	3.18 J	3.01 J	5 (1)	20
Batch number: 131540637002A	Sample number(s): 7075248-7075253,7075256 UNSPK: P078552 BKG: P078552								
Silver	103	103	75-125	0	20	0.0380 J	0.0241 J	45* (1)	20
Strontium	148*	129*	75-125	5	20	17.7	16.7	6	20
Thallium	112	108	75-125	2	20	0.249	0.284	13 (1)	20
Batch number: 131540637002B	Sample number(s): 7075248-7075253,7075256 UNSPK: P078552 BKG: P078552								
Selenium	94	103	75-125	9	20	0.143 J	0.0974 J	38* (1)	20
Batch number: 13150039401A	Sample number(s): 7075248-7075253,7075256 BKG: 7075248								
15a pH by 9045D						6.28	6.31	0	3
Batch number: 13155162401A	Sample number(s): 7075248-7075253,7075255-7075256 BKG: 7075249								
14a Moisture Content by 160.3						4.3	4.4	3	20
Batch number: 13154001	Sample number(s): 7075248-7075253,7075255-7075256 UNSPK: P076735								
2378-TCDD	102	106	40-135	4	20				
12378-PeCDD	98	99	40-135	1	20				
123478-HxCDD	96	95	40-135	1	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	100	95	40-135	5	20				
1234678-HpCDD	90	90	40-135	1	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
OCDD	64	66	40-135	1	20				
2378-TCDF	108	102	40-135	6	20				
12378-PeCDF	101	100	40-135	1	20				
23478-PeCDF	97	99	40-135	2	20				
123478-HxCDF	92	92	40-135	0	20				
123678-HxCDF	93	93	40-135	0	20				
123789-HxCDF	92	91	40-135	0	20				
234678-HxCDF	92	92	40-135	1	20				
1234678-HpCDF	91	90	40-135	0	20				
1234789-HpCDF	92	92	40-135	0	20				
OCDF	87	88	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13155SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7075248	82	79	84
7075249	83	83	86
7075250	80	82	85
7075251	74	74	75
7075252	82	84	87
7075253	85	82	84
7075256	84	87	89
Blank	83	89	92
LCS	83	90	93
MS	69	70	83
MSD	87	92	94
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13155WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7075257	97	103	107
Blank	93	102	100
LCS	98	111	112
LCSD	95	103	106
Limits:	64-120	62-141	58-134

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Surrogate Quality Control

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13155A16A

	Trifluorotoluene-F
7075249	89
7075251	88
7075252	86
Blank	91
LCS	89
MS	86
MSD	85
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13156C20A

	Trifluorotoluene-F
7075254	82
7075257	81
Blank	82
LCS	118
LCSD	113
Limits:	63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131540014A

	Chlorobenzene	Orthoterphenyl
7075248	99	72
7075249	83	82
7075250	97	87
7075251	101	95
7075252	109	109
7075253	92	84
7075256	102	96
Blank	99	99
LCS	91	89
MS	102	82
MSD	109	93
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131540033A

	Chlorobenzene	Orthoterphenyl
7075257	93	85
Blank	98	85
LCS	93	91
LCSD	95	93
Limits:	45-126	69-119

Analysis Name: 23a Dioxin/Furan by EPA 1613B

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Surrogate Quality Control

Batch number: 13154001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7075248	70	100	75	71	72	71
7075249	71	102	80	80	71	71
7075250	66	97	75	75	74	71
7075251	66	90	77	80	77	76
7075252	63	90	75	79	75	72
7075253	76	105	81	83	80	81
7075255	39	62	53	55	50	46
7075256	55	80	64	66	64	64
Blank	63	95	78	84	83	84
MS	31	48	38	38	37	35
MSD	60	95	72	75	74	73
OPR	65	92	75	79	75	77
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7075248	88	80	81	86	69	71
7075249	83	71	77	98	71	69
7075250	85	72	77	92	74	75
7075251	91	74	79	85	78	79
7075252	86	73	77	87	75	75
7075253	91	83	90	98	79	78
7075255	64	54	56	56	50	51
7075256	78	65	74	73	64	64
Blank	100	77	81	90	88	84
MS	43	37	40	45	36	36
MSD	88	75	80	87	76	75
OPR	94	76	82	89	80	82
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7075248	71	78	93	75	93
7075249	68	71	86	73	105
7075250	72	77	93	74	99
7075251	78	81	93	72	94
7075252	75	77	90	72	94
7075253	79	88	108	77	108
7075255	48	54	61	46	66
7075256	63	67	82	58	81
Blank	85	86	97	66	98
MS	35	39	45	33	48
MSD	75	77	91	69	93
OPR	79	86	99	68	92
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13155003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393523
Reported: 06/11/13 at 12:10 PM

Surrogate Quality Control

7075257	68	77	86	84	84	89
Blank	75	83	92	90	90	97
OPR	67	78	86	86	85	94
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7075257	83	79	74	77	84	87
Blank	90	85	80	83	92	90
OPR	86	83	78	79	87	87
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7075257	83	82	77	73	76	
Blank	89	88	84	77	80	
OPR	86	86	81	73	76	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Cp# 1393523 Sample# 7075248-57

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/29/2013
CarrierName: FedEx
AirbillNo: 799874660787

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130529-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-831-SA5A-SB-0.0-0.5	5/29/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-831-SA5A-SB-0.0-0.5	5/29/13 08:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-831-SA5A-SB-4.5-5.5	5/29/13 09:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-831-SA5A-SB-4.5-5.5	5/29/13 09:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-832-SA5A-SB-0.0-0.5	5/29/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-832-SA5A-SB-0.0-0.5	5/29/13 09:50	SO	None	1 - 4 oz glass	10 day														X																	
SL-832-SA5A-SB-4.0-5.0	5/29/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-832-SA5A-SB-4.0-5.0	5/29/13 10:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-832-SA5A-SB-7.2-8.2	5/29/13 10:35	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-832-SA5A-SB-7.2-8.2	5/29/13 10:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-842-SA5A-SB-0.0-0.5	5/29/13 11:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-842-SA5A-SB-0.0-0.5	5/29/13 11:05	SO	None	1 - 4 oz glass	10 day														X																	

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shipped 05/29/2013 1600											
									Patti	5/30/2013	0945

COC Rev 2

COC: 20130529-01, Page 1 of 1

1 of 1

acct#13013 Ap# 1393523 Sample# 7075248-57

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/29/2013
CarrierName: FedEx
AirbillNo: 799874660787

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130529-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-831-SA5A-SB-4.5-5.5	5/29/13 09:30	SO	None	2 - Encore	10 day																			X												
SL-832-SA5A-SB-4.0-5.0	5/29/13 10:30	SO	None	2 - Encore	10 day																			X												
SL-832-SA5A-SB-7.2-8.2	5/29/13 10:35	SO	None	2 - Encore	10 day																			X												
TB-052913	5/29/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-843-SA5A-SB-0.0-0.5	5/29/13 14:25	SO	None	1 - SS-Sleeve	10 day									X																						
SL-844-SA5A-SB-0.0-0.5	5/29/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-844-SA5A-SB-0.0-0.5	5/29/13 13:45	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: H. Coston

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stuff Myers	05/29/13	1600									
									Patsy	5/30/2013	0945

COC Rev 2

COC: 20130529-03, Page 1 of 1

acct# 13013 Cap# 1393523 Sample# 7075248-57

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/29/2013
CarrierName: FedEx
AirbillNo: 799874660787

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130529-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-052913	5/29/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-052913	5/29/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																								
EB-052913	5/29/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB-052913	5/29/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB-052913	5/29/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB-052913	5/29/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	05/29/13	1600									
									Pat Gu	5/30/2013	0945

COC Rev 2

COC: 20130529-02, Page 1 of 1

1 of 1

eurofins | Lancaster Laboratories

C# 1393523

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM Smith

Date of Receipt: 5/30/13

Time of Receipt: 0945

Source Code: SO

Shipping Container Sealed: ~~YES~~ NO

Custody Seal Present * : ~~YES~~ NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	OT131	1.0	TB	WI	y	B	
2	↓	1.5	↓	↓	↓	↓	
3		1.5					
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gh 3472 **Date/Time:** 5/30/13 1154

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 11, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 05/31/2013
Group Number: 1393848
SDG: PH043
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
EB-053013 Water	7076730
SL-835-SA5A-SB-0.0-0.5 Soil	7076731
SL-836-SA5A-SB-0.0-0.5 Soil	7076732
SL-836-SA5A-SB-2.5-3.5 Soil	7076733
SL-837-SA5A-SB-0.0-0.5 Soil	7076734
SL-837-SA5A-SB-4.5-5.5 Soil	7076735
SL-837-SA5A-SB-4.5-5.5MS Soil	7076736
SL-837-SA5A-SB-4.5-5.5MSD Soil	7076737
SL-837-SA5A-SB-4.5-5.5DUP Soil	7076738
SL-1237-SA5A-SB-4.5-5.5 Soil	7076739
TB-053013 Water	7076740
SL-819-SA5A-SB-0.0-0.5 Soil	7076741
SL-819-SA5A-SB-6.5-7.5 Soil	7076742
SL-833-SA5A-SB-0.0-0.5 Soil	7076743
SL-833-SA5A-SB-2.5-3.5 Soil	7076744
SL-834-SA5A-SB-0.0-0.5 Soil	7076745
SL-834-SA5A-SB-2.4-3.4 Soil	7076746

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.15	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.077	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C30 - C40)	n.a.	0.50	U	0.50	0.10	1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.050	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1

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

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
08014	Boron	7440-42-8	0.100 U	0.100	0.0083	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b. pH (9040B and 9040C)	n.a.	5.1	0.010	0.010	1

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

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.18	U	2.18	0.126	1
10915	12378-PeCDD	40321-76-4	0.174	JB	10.9	0.128	1
10915	123478-HxCDD	39227-28-6	0.135	JBQ	10.9	0.107	1
10915	123678-HxCDD	57653-85-7	0.147	JBQ	10.9	0.110	1
10915	123789-HxCDD	19408-74-3	10.9	U	10.9	0.106	1
10915	1234678-HpCDD	35822-46-9	0.331	JBQ	10.9	0.110	1
10915	OCDD	3268-87-9	0.810	JBQ	21.8	0.112	1
10915	2378-TCDF	51207-31-9	2.18	U	2.18	0.101	1
10915	12378-PeCDF	57117-41-6	0.361	JBQ	10.9	0.0781	1
10915	23478-PeCDF	57117-31-4	0.219	JBQ	10.9	0.0695	1
10915	123478-HxCDF	70648-26-9	0.225	JB	10.9	0.0597	1
10915	123678-HxCDF	57117-44-9	0.220	JBQ	10.9	0.0577	1
10915	123789-HxCDF	72918-21-9	0.225	JBQ	10.9	0.0606	1
10915	234678-HxCDF	60851-34-5	0.228	JBQ	10.9	0.0597	1
10915	1234678-HpCDF	67562-39-4	0.388	JB	10.9	0.0429	1
10915	1234789-HpCDF	55673-89-7	0.204	JB	10.9	0.0511	1
10915	OCDF	39001-02-0	0.664	JBQ	21.8	0.121	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.202				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155WAC026	06/10/2013 18:23	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13155WAC026	06/04/2013 18:45	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13158B20A	06/10/2013 11:07	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13158B20A	06/10/2013 11:07	Laura M Krieger	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131540033A	06/04/2013 22:57	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131540033A	06/04/2013 10:00	Olivia Arosemena	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13155003	06/07/2013 08:15	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13155003	06/05/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07044	Antimony	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07035	Arsenic	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07046	Barium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07047	Beryllium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
08014	Boron	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07049	Cadmium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01750	Calcium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07051	Chromium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07052	Cobalt	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07053	Copper	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01754	Iron	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07055	Lead	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01756	Lithium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01757	Magnesium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07058	Manganese	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07061	Nickel	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01762	Potassium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
01767	Sodium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07069	Tin	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07070	Titanium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07071	Vanadium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
07072	Zinc	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
10144	Zirconium	SW-846 6010C	1	131560635001	06/06/2013 19:04	John P Hook	1
06041	Selenium	SW-846 6020A	1	131560639001B	06/11/2013 04:40	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131560639001A	06/11/2013 04:40	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131560639001A	06/11/2013 04:40	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131560639001A	06/11/2013 04:40	Choon Y Tian	1

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

Sample Description: EB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076730
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 15:00 by PH

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB530 SDG#: PH043-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	3b Mercury 7470A	SW-846 7470A	2	131575713007	06/10/2013 09:03	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131560635001	06/06/2013 07:17	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131560639001	06/06/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	2	131575713007	06/07/2013 17:10	Nelli S Markaryan	1
12152	28b. pH (9040B and 9040C)	SW-846 9040C	1	13151121522A	05/31/2013 21:10	Luz M Groff	1

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

Sample Description: SL-835-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076731
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

835-0 SDG#: PH043-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	4.6	J	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	28		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	41		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.1		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 01:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.77	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.39	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.39	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.77	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.77	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.9	0.77	1
12969	Benzo(e)pyrene	192-97-2	20	U	20	3.9	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.77	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.77	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	7.0	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	7.0	1
12969	Chrysene	218-01-9	1.8	J	1.9	0.39	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.77	1
12969	Diethylphthalate	84-66-2	21	U	21	7.0	1
12969	Dimethylphthalate	131-11-3	21	U	21	7.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	7.0	1
12969	Fluoranthene	206-44-0	1.2	J	1.9	0.77	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.77	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.77	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.77	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.77	1
12969	Naphthalene	91-20-3	0.94	J	1.9	0.77	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.77	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	7.0	1
12969	Phenanthrene	85-01-8	1.0	J	1.9	0.77	1
12969	Pyrene	129-00-0	0.97	J	1.9	0.77	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C15-C20)	n.a.	5.8	U	5.8	2.3	1
12952	EFH (C21-C30)	n.a.	8.5		5.8	2.3	1
12952	EFH (C30-C40)	n.a.	16		12	4.6	1
12952	EFH (C8-C11)	n.a.	5.8	U	5.8	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		44.6	8.59	1
06944	Antimony	7440-36-0	0.734	J	4.46	0.557	1
06935	Arsenic	7440-38-2	5.20		4.46	0.368	1
06946	Barium	7440-39-3	100		1.11	0.0368	1
06947	Beryllium	7440-41-7	0.548	J	1.11	0.0747	1
07914	Boron	7440-42-8	2.89	J	11.1	0.925	1
06949	Cadmium	7440-43-9	0.332	J	1.11	0.0368	1
01650	Calcium	7440-70-2	2,000		22.3	4.48	1
06951	Chromium	7440-47-3	19.5		3.34	0.0980	1
06952	Cobalt	7440-48-4	5.52		1.11	0.100	1
06953	Copper	7440-50-8	10.5		2.23	0.201	1
01654	Iron	7439-89-6	17,900		44.6	4.23	1
06955	Lead	7439-92-1	6.13		3.34	0.524	1
01656	Lithium	7439-93-2	19.0		4.5	0.61	1

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,570		11.1	1.93	1
06958	Manganese	7439-96-5	319		1.11	0.0925	1
06960	Molybdenum	7439-98-7	0.480	J	2.23	0.189	1
06961	Nickel	7440-02-0	11.6		2.23	0.123	1
10145	Phosphorus	7723-14-0	373		11.1	0.568	1
01662	Potassium	7440-09-7	3,520		111	15.0	1
01667	Sodium	7440-23-5	80.8	J	111	18.6	1
06969	Tin	7440-31-5	2.88	J	11.1	0.245	1
06970	Titanium	7440-32-6	1,140		1.11	0.189	1
06971	Vanadium	7440-62-2	32.3		1.11	0.123	1
06972	Zinc	7440-66-6	50.6		4.46	0.223	1
10146	Zirconium	7440-67-7	4.08	J	5.57	0.925	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.146	J	0.446	0.111	2
06142	Silver	7440-22-4	0.0354	J	0.223	0.0223	2
06144	Strontium	7440-24-6	21.8		0.446	0.0379	2
06145	Thallium	7440-28-0	0.277		0.223	0.0334	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0187	U	0.0187	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.13		0.0100	0.0100	1
	The pH was measured in water at 23.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	13.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.10	U	1.10	0.0297	1
11031	12378-PeCDD	40321-76-4	0.132	J	5.52	0.0403	1
11031	123478-HxCDD	39227-28-6	0.213	J	5.52	0.0672	1
11031	123678-HxCDD	57653-85-7	0.656	J	5.52	0.0735	1
11031	123789-HxCDD	19408-74-3	0.553	JQ	5.52	0.0740	1
11031	1234678-HpCDD	35822-46-9	14.4	B	5.52	0.0958	1
11031	OCDD	3268-87-9	253	B	11.0	0.0764	1
11031	2378-TCDF	51207-31-9	0.113	J	1.10	0.0651	1
11031	12378-PeCDF	57117-41-6	0.543	J	5.52	0.0342	1
11031	23478-PeCDF	57117-31-4	0.408	J	5.52	0.0321	1
11031	123478-HxCDF	70648-26-9	0.297	JB	5.52	0.0695	1
11031	123678-HxCDF	57117-44-9	0.269	JBQ	5.52	0.0680	1
11031	123789-HxCDF	72918-21-9	0.316	JB	5.52	0.0811	1
11031	234678-HxCDF	60851-34-5	0.257	JBQ	5.52	0.0718	1
11031	1234678-HpCDF	67562-39-4	2.09	JB	5.52	0.0418	1
11031	1234789-HpCDF	55673-89-7	0.309	J	5.52	0.0600	1
11031	OCDF	39001-02-0	6.37	JB	11.0	0.0428	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.675				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	99	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	107	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 09:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 01:28	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 08:58	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:23	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:42	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:42	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:42	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:42	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1

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

Sample Description: SL-836-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076732
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-0 SDG#: PH043-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.4	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	3.0		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.3	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.73	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.2		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	2.8		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.92	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.88	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7		1.7	0.69	1
12969	Pyrene	129-00-0	2.7		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	3.1	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	8.7	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,100		41.2	7.94	1
06944	Antimony	7440-36-0	0.881	J	4.12	0.515	1
06935	Arsenic	7440-38-2	5.59		4.12	0.340	1
06946	Barium	7440-39-3	99.3		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.753	J	1.03	0.0690	1
07914	Boron	7440-42-8	2.20	J	10.3	0.855	1
06949	Cadmium	7440-43-9	0.278	J	1.03	0.0340	1
01650	Calcium	7440-70-2	2,300		20.6	4.14	1
06951	Chromium	7440-47-3	22.6		3.09	0.0907	1

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.29		1.03	0.0927	1
06953	Copper	7440-50-8	12.0		2.06	0.185	1
01654	Iron	7439-89-6	23,200		41.2	3.92	1
06955	Lead	7439-92-1	6.94		3.09	0.484	1
01656	Lithium	7439-93-2	23.9		4.1	0.57	1
01657	Magnesium	7439-95-4	4,340		10.3	1.78	1
06958	Manganese	7439-96-5	318		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.516	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.7		2.06	0.113	1
10145	Phosphorus	7723-14-0	434		10.3	0.525	1
01662	Potassium	7440-09-7	3,140		103	13.9	1
01667	Sodium	7440-23-5	89.2	J	103	17.2	1
06969	Tin	7440-31-5	3.06	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,260		1.03	0.175	1
06971	Vanadium	7440-62-2	42.6		1.03	0.113	1
06972	Zinc	7440-66-6	53.8		4.12	0.206	1
10146	Zirconium	7440-67-7	4.60	J	5.15	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.151	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0475	J	0.206	0.0206	2
06144	Strontium	7440-24-6	24.8		0.412	0.0350	2
06145	Thallium	7440-28-0	0.291		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.66		0.0100	0.0100	1
	The pH was measured in water at 23.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.993	U	0.993	0.0333	1
11031	12378-PeCDD	40321-76-4	0.0868	JQ	4.96	0.0418	1
11031	123478-HxCDD	39227-28-6	4.96	U	4.96	0.0304	1
11031	123678-HxCDD	57653-85-7	0.0920	J	4.96	0.0341	1
11031	123789-HxCDD	19408-74-3	0.0783	J	4.96	0.0331	1
11031	1234678-HpCDD	35822-46-9	0.137	JB	4.96	0.0380	1
11031	OCDD	3268-87-9	1.30	JB	9.93	0.0449	1
11031	2378-TCDF	51207-31-9	0.993	U	0.993	0.0265	1
11031	12378-PeCDF	57117-41-6	0.0877	JQ	4.96	0.0189	1
11031	23478-PeCDF	57117-31-4	0.0172	JQ	4.96	0.0168	1
11031	123478-HxCDF	70648-26-9	0.0627	JBQ	4.96	0.0234	1
11031	123678-HxCDF	57117-44-9	0.0321	JBQ	4.96	0.0228	1
11031	123789-HxCDF	72918-21-9	0.110	JB	4.96	0.0259	1
11031	234678-HxCDF	60851-34-5	4.96	U	4.96	0.0231	1
11031	1234678-HpCDF	67562-39-4	0.0926	JB	4.96	0.0338	1
11031	1234789-HpCDF	55673-89-7	4.96	U	4.96	0.0455	1
11031	OCDF	39001-02-0	0.195	JB	9.93	0.0454	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0307				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	92	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 14:14	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/04/2013 23:32	Laura M Krieger	26.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 16:57	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 16:57	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 01:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 09:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:27	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:52	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:52	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:52	Choon Y Tian	2

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

Sample Description: SL-836-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076733
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 10:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

836-2 SDG#: PH043-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:52	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	13		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	22		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		41.1	7.92	1
06944	Antimony	7440-36-0	0.727	J	4.11	0.514	1
06935	Arsenic	7440-38-2	4.82		4.11	0.339	1
06946	Barium	7440-39-3	97.8		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.575	J	1.03	0.0689	1
07914	Boron	7440-42-8	2.88	J	10.3	0.853	1
06949	Cadmium	7440-43-9	0.394	J	1.03	0.0339	1
01650	Calcium	7440-70-2	2,220		20.6	4.13	1
06951	Chromium	7440-47-3	20.4		3.08	0.0904	1
06952	Cobalt	7440-48-4	5.54		1.03	0.0925	1
06953	Copper	7440-50-8	11.6		2.06	0.185	1
01654	Iron	7439-89-6	19,200		41.1	3.91	1
06955	Lead	7439-92-1	14.2		3.08	0.483	1
01656	Lithium	7439-93-2	19.7		4.1	0.57	1

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,700		10.3	1.78	1
06958	Manganese	7439-96-5	323		1.03	0.0853	1
06960	Molybdenum	7439-98-7	0.454	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.5		2.06	0.113	1
10145	Phosphorus	7723-14-0	408		10.3	0.524	1
01662	Potassium	7440-09-7	3,580		103	13.9	1
01667	Sodium	7440-23-5	77.9	J	103	17.2	1
06969	Tin	7440-31-5	2.98	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,160		1.03	0.175	1
06971	Vanadium	7440-62-2	33.8		1.03	0.113	1
06972	Zinc	7440-66-6	57.2		4.11	0.206	1
10146	Zirconium	7440-67-7	3.21	J	5.14	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.131	J	0.411	0.103	2
06142	Silver	7440-22-4	0.158	J	0.206	0.0206	2
06144	Strontium	7440-24-6	19.1		0.411	0.0349	2
06145	Thallium	7440-28-0	0.260		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0150	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.27		0.0100	0.0100	1
	The pH was measured in water at 23.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.142	JQ	1.01	0.0379	1
11031	12378-PeCDD	40321-76-4	1.27	JQ	5.07	0.0701	1
11031	123478-HxCDD	39227-28-6	1.87	J	5.07	0.0723	1
11031	123678-HxCDD	57653-85-7	3.93	J	5.07	0.0782	1
11031	123789-HxCDD	19408-74-3	4.91	J	5.07	0.0779	1
11031	1234678-HpCDD	35822-46-9	125	B	5.07	0.160	1
11031	OCDD	3268-87-9	1,670	B	10.1	0.0960	1
11031	2378-TCDF	51207-31-9	0.481	J	1.01	0.110	1
11031	12378-PeCDF	57117-41-6	0.953	JQ	5.07	0.0546	1
11031	23478-PeCDF	57117-31-4	1.04	J	5.07	0.0498	1
11031	123478-HxCDF	70648-26-9	1.05	JB	5.07	0.0722	1
11031	123678-HxCDF	57117-44-9	1.20	JB	5.07	0.0691	1
11031	123789-HxCDF	72918-21-9	0.406	JB	5.07	0.0842	1
11031	234678-HxCDF	60851-34-5	1.41	JB	5.07	0.0700	1
11031	1234678-HpCDF	67562-39-4	27.8	B	5.07	0.0556	1
11031	1234789-HpCDF	55673-89-7	2.29	J	5.07	0.0682	1
11031	OCDF	39001-02-0	119	B	10.1	0.0546	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.93				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	97	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	100	24 - 185
13C12-23478-PeCDF	97	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	84	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 14:47	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 02:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 10:51	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:38	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:54	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:54	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:54	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:54	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1

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

Sample Description: SL-837-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076734
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-0 SDG#: PH043-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	31		20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.65
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.7	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	10	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,700		42.4	8.17	1
06944	Antimony	7440-36-0	1.22	J	4.24	0.530	1
06935	Arsenic	7440-38-2	3.74	J	4.24	0.350	1
06946	Barium	7440-39-3	171		1.06	0.0350	1
06947	Beryllium	7440-41-7	1.66		1.06	0.0710	1
07914	Boron	7440-42-8	10.6	U	10.6	0.880	1
06949	Cadmium	7440-43-9	0.0392	J	1.06	0.0350	1
01650	Calcium	7440-70-2	5,340		21.2	4.26	1
06951	Chromium	7440-47-3	51.2		3.18	0.0933	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
06952	Cobalt	7440-48-4	13.1		1.06	0.0954	1
06953	Copper	7440-50-8	28.7		2.12	0.191	1
01654	Iron	7439-89-6	43,000		212	20.1	5
06955	Lead	7439-92-1	18.6		3.18	0.498	1
01656	Lithium	7439-93-2	61.0		4.2	0.58	1
01657	Magnesium	7439-95-4	10,000		10.6	1.83	1
06958	Manganese	7439-96-5	518		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.722	J	2.12	0.180	1
06961	Nickel	7440-02-0	27.0		2.12	0.117	1
10145	Phosphorus	7723-14-0	464		10.6	0.541	1
01662	Potassium	7440-09-7	2,000		106	14.3	1
01667	Sodium	7440-23-5	190		106	17.7	1
06969	Tin	7440-31-5	3.92	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,460		1.06	0.180	1
06971	Vanadium	7440-62-2	82.3		1.06	0.117	1
06972	Zinc	7440-66-6	80.6		4.24	0.212	1
10146	Zirconium	7440-67-7	6.90		5.30	0.880	1
	SW-846 6020A		mg/kg		mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.149	J	0.424	0.106	2
06142	Silver	7440-22-4	0.0457	J	0.212	0.0212	2
06144	Strontium	7440-24-6	45.7		0.424	0.0360	2
06145	Thallium	7440-28-0	0.309		0.212	0.0318	2
	SW-846 7471B		mg/kg		mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.0153	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		Std. Units		Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	6.83		0.0100	0.0100	1
	The pH was measured in water at 22.9 C.						
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	8.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.09	U	1.09	0.0284	1
11031	12378-PeCDD	40321-76-4	0.0674	JQ	5.44	0.0339	1
11031	123478-HxCDD	39227-28-6	0.0963	J	5.44	0.0301	1
11031	123678-HxCDD	57653-85-7	0.164	J	5.44	0.0332	1
11031	123789-HxCDD	19408-74-3	0.164	J	5.44	0.0311	1
11031	1234678-HpCDD	35822-46-9	5.07	JB	5.44	0.0514	1
11031	OCDD	3268-87-9	65.8	B	10.9	0.0433	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0252	1
11031	12378-PeCDF	57117-41-6	0.0494	JQ	5.44	0.0163	1
11031	23478-PeCDF	57117-31-4	5.44	U	5.44	0.0151	1
11031	123478-HxCDF	70648-26-9	0.0520	JBQ	5.44	0.0243	1
11031	123678-HxCDF	57117-44-9	0.0567	JB	5.44	0.0232	1
11031	123789-HxCDF	72918-21-9	0.0625	JBQ	5.44	0.0249	1
11031	234678-HxCDF	60851-34-5	0.0711	JB	5.44	0.0228	1
11031	1234678-HpCDF	67562-39-4	1.28	JB	5.44	0.0219	1
11031	1234789-HpCDF	55673-89-7	0.200	J	5.44	0.0291	1
11031	OCDF	39001-02-0	5.84	JB	10.9	0.0291	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.142				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	99	24 - 185
13C12-23478-PeCDF	101	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 03:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 00:10	Laura M Krieger	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:00	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:01	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 02:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 11:48	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 18:59	John P Hook	5
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 10:59	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:28	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:28	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:28	Choon Y Tian	2

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

Sample Description: SL-837-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076735
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:28	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076736
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	29		1.8	0.73	1
12969	Acenaphthylene	208-96-8	29		1.8	0.36	1
12969	Anthracene	120-12-7	29		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	30		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	30		1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	28		19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	23		1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	29		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	27		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	28		20	6.6	1
12969	Chrysene	218-01-9	30		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	26		1.8	0.73	1
12969	Diethylphthalate	84-66-2	31		20	6.6	1
12969	Dimethylphthalate	131-11-3	32		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	29		20	6.6	1
12969	Fluoranthene	206-44-0	31		1.8	0.73	1
12969	Fluorene	86-73-7	30		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	29		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	28		1.8	0.73	1
12969	Naphthalene	91-20-3	32		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	34		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	29		20	6.6	1
12969	Phenanthrene	85-01-8	28		1.8	0.73	1
12969	Pyrene	129-00-0	28		1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	11		1.0	0.2	23.63
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	4.3	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	9.1		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	13		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,400		42.4	8.17	1
06944	Antimony	7440-36-0	34.6		4.24	0.530	1
06935	Arsenic	7440-38-2	20.5		4.24	0.350	1
06946	Barium	7440-39-3	373		1.06	0.0350	1
06947	Beryllium	7440-41-7	7.06		1.06	0.0710	1
07914	Boron	7440-42-8	206		10.6	0.880	1
06949	Cadmium	7440-43-9	5.06		1.06	0.0350	1
01650	Calcium	7440-70-2	5,660		21.2	4.26	1
06951	Chromium	7440-47-3	72.8		3.18	0.0933	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076736
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	58.2	1.06	0.0954	1
06953	Copper	7440-50-8	54.5	2.12	0.191	1
01654	Iron	7439-89-6	40,300	212	20.1	5
06955	Lead	7439-92-1	30.5	3.18	0.498	1
01656	Lithium	7439-93-2	172	4.2	0.58	1
01657	Magnesium	7439-95-4	9,880	10.6	1.83	1
06958	Manganese	7439-96-5	395	1.06	0.0880	1
06960	Molybdenum	7439-98-7	203	2.12	0.180	1
06961	Nickel	7440-02-0	75.1	2.12	0.117	1
10145	Phosphorus	7723-14-0	531	10.6	0.541	1
01662	Potassium	7440-09-7	3,710	106	14.3	1
01667	Sodium	7440-23-5	1,240	106	17.7	1
06969	Tin	7440-31-5	382	10.6	0.233	1
06970	Titanium	7440-32-6	1,840	1.06	0.180	1
06971	Vanadium	7440-62-2	135	1.06	0.117	1
06972	Zinc	7440-66-6	131	4.24	0.212	1
10146	Zirconium	7440-67-7	112	5.30	0.880	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.42	0.424	0.106	2
06142	Silver	7440-22-4	12.1	0.212	0.0212	2
06144	Strontium	7440-24-6	54.6	0.424	0.0360	2
06145	Thallium	7440-28-0	0.765	0.212	0.0318	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.188	0.0175	0.0105	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	8.4	0.10	0.10	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076736
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.3		1.09	0.151	1
11031	12378-PeCDD	40321-76-4	107		5.45	0.124	1
11031	123478-HxCDD	39227-28-6	104		5.45	0.0983	1
11031	123678-HxCDD	57653-85-7	108		5.45	0.105	1
11031	123789-HxCDD	19408-74-3	109		5.45	0.103	1
11031	1234678-HpCDD	35822-46-9	103	B	5.45	0.125	1
11031	OCDD	3268-87-9	206	B	10.9	0.0995	1
11031	2378-TCDF	51207-31-9	23.5		1.09	0.121	1
11031	12378-PeCDF	57117-41-6	110		5.45	0.0905	1
11031	23478-PeCDF	57117-31-4	106		5.45	0.0853	1
11031	123478-HxCDF	70648-26-9	100	B	5.45	0.154	1
11031	123678-HxCDF	57117-44-9	101	B	5.45	0.160	1
11031	123789-HxCDF	72918-21-9	100	B	5.45	0.183	1
11031	234678-HxCDF	60851-34-5	100	B	5.45	0.154	1
11031	1234678-HpCDF	67562-39-4	100	B	5.45	0.100	1
11031	1234789-HpCDF	55673-89-7	100		5.45	0.147	1
11031	OCDF	39001-02-0	196	B	10.9	0.124	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	31	25 - 164
13C12-12378-PeCDD	45	25 - 181
13C12-123478-HxCDD	36	32 - 141
13C12-123678-HxCDD	36	28 - 130
13C12-123789-HxCDD	35	28 - 130
13C12-1234678-HpCDD	39	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	33	24 - 169
13C12-12378-PeCDF	48	24 - 185
13C12-23478-PeCDF	48	21 - 178
13C12-123478-HxCDF	38	26 - 152
13C12-123678-HxCDF	38	26 - 123
13C12-234678-HxCDF	37	28 - 136
13C12-123789-HxCDF	35	29 - 147
13C12-1234678-HpCDF	43	28 - 143
13C12-1234789-HpCDF	37	26 - 138
13C12-OCDF	40	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076736
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 04:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 00:48	Laura M Krieger	23.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:01	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:01	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 02:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 12:44	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 19:11	John P Hook	5
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:12	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:35	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:35	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:35	Choon Y Tian	2

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076736
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:35	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076737
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	32		1.8	0.73	1
12969	Acenaphthylene	208-96-8	32		1.8	0.36	1
12969	Anthracene	120-12-7	33		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	38		1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	38		1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	50		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	35		19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	27		1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	38		1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	32		20	6.6	1
12969	Di-n-butylphthalate	84-74-2	34		20	6.6	1
12969	Chrysene	218-01-9	37		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.8	0.73	1
12969	Diethylphthalate	84-66-2	60		20	6.6	1
12969	Dimethylphthalate	131-11-3	36		20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	36		20	6.6	1
12969	Fluoranthene	206-44-0	38		1.8	0.73	1
12969	Fluorene	86-73-7	35		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	31		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	32		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	31		1.8	0.73	1
12969	Naphthalene	91-20-3	33		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	34		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	44		20	6.6	1
12969	Phenanthrene	85-01-8	33		1.8	0.73	1
12969	Pyrene	129-00-0	33		1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	13		1.1	0.2	24.8
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	6.9		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	4.0	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,100		42.4	8.17	1
06944	Antimony	7440-36-0	33.9		4.24	0.530	1
06935	Arsenic	7440-38-2	19.4		4.24	0.350	1
06946	Barium	7440-39-3	376		1.06	0.0350	1
06947	Beryllium	7440-41-7	7.07		1.06	0.0710	1
07914	Boron	7440-42-8	201		10.6	0.880	1
06949	Cadmium	7440-43-9	4.96		1.06	0.0350	1
01650	Calcium	7440-70-2	5,900		21.2	4.26	1
06951	Chromium	7440-47-3	75.0		3.18	0.0933	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076737
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	59.1	1.06	0.0954	1
06953	Copper	7440-50-8	56.4	2.12	0.191	1
01654	Iron	7439-89-6	43,600	212	20.1	5
06955	Lead	7439-92-1	31.9	3.18	0.498	1
01656	Lithium	7439-93-2	172	4.2	0.58	1
01657	Magnesium	7439-95-4	10,400	10.6	1.83	1
06958	Manganese	7439-96-5	436	1.06	0.0880	1
06960	Molybdenum	7439-98-7	201	2.12	0.180	1
06961	Nickel	7440-02-0	76.6	2.12	0.117	1
10145	Phosphorus	7723-14-0	551	10.6	0.541	1
01662	Potassium	7440-09-7	3,710	106	14.3	1
01667	Sodium	7440-23-5	1,240	106	17.7	1
06969	Tin	7440-31-5	379	10.6	0.233	1
06970	Titanium	7440-32-6	1,820	1.06	0.180	1
06971	Vanadium	7440-62-2	140	1.06	0.117	1
06972	Zinc	7440-66-6	135	4.24	0.212	1
10146	Zirconium	7440-67-7	111	5.30	0.880	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.31	0.424	0.106	2
06142	Silver	7440-22-4	12.2	0.212	0.0212	2
06144	Strontium	7440-24-6	55.7	0.424	0.0360	2
06145	Thallium	7440-28-0	0.753	0.212	0.0318	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.190	0.0175	0.0105	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	8.4	0.10	0.10	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076737
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.1		1.09	0.0923	1
11031	12378-PeCDD	40321-76-4	108		5.45	0.0766	1
11031	123478-HxCDD	39227-28-6	103		5.45	0.0894	1
11031	123678-HxCDD	57653-85-7	106		5.45	0.0963	1
11031	123789-HxCDD	19408-74-3	104		5.45	0.0899	1
11031	1234678-HpCDD	35822-46-9	104	B	5.45	0.0941	1
11031	OCDD	3268-87-9	209	B	10.9	0.0724	1
11031	2378-TCDF	51207-31-9	22.2		1.09	0.0844	1
11031	12378-PeCDF	57117-41-6	109		5.45	0.0561	1
11031	23478-PeCDF	57117-31-4	108		5.45	0.0505	1
11031	123478-HxCDF	70648-26-9	101	B	5.45	0.0974	1
11031	123678-HxCDF	57117-44-9	101	B	5.45	0.0942	1
11031	123789-HxCDF	72918-21-9	99.8	B	5.45	0.103	1
11031	234678-HxCDF	60851-34-5	101	B	5.45	0.0958	1
11031	1234678-HpCDF	67562-39-4	99.7	B	5.45	0.0666	1
11031	1234789-HpCDF	55673-89-7	100		5.45	0.0909	1
11031	OCDF	39001-02-0	199	B	10.9	0.0597	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	93	24 - 185
13C12-23478-PeCDF	95	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076737
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 05:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 01:26	Laura M Krieger	24.8
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:01	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:02	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 03:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 13:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 19:15	John P Hook	5
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:16	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:38	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:38	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:38	Choon Y Tian	2

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

Sample Description: SL-837-SA5A-SB-4.5-5.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076737
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:38	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-837-SA5A-SB-4.5-5.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076738
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,700		42.4	8.17	1
06944	Antimony	7440-36-0	1.64	J	4.24	0.530	1
06935	Arsenic	7440-38-2	5.30		4.24	0.350	1
06946	Barium	7440-39-3	153		1.06	0.0350	1
06947	Beryllium	7440-41-7	1.56		1.06	0.0710	1
07914	Boron	7440-42-8	10.6	U	10.6	0.880	1
06949	Cadmium	7440-43-9	0.0763	J	1.06	0.0350	1
01650	Calcium	7440-70-2	4,980		21.2	4.26	1
06951	Chromium	7440-47-3	49.2		3.18	0.0933	1
06952	Cobalt	7440-48-4	8.38		1.06	0.0954	1
06953	Copper	7440-50-8	25.0		2.12	0.191	1
01654	Iron	7439-89-6	40,100		212	20.1	5
06955	Lead	7439-92-1	15.4		3.18	0.498	1
01656	Lithium	7439-93-2	59.0		4.2	0.58	1
01657	Magnesium	7439-95-4	9,230		10.6	1.83	1
06958	Manganese	7439-96-5	376		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.580	J	2.12	0.180	1
06961	Nickel	7440-02-0	24.2		2.12	0.117	1
10145	Phosphorus	7723-14-0	396		10.6	0.541	1
01662	Potassium	7440-09-7	1,830		106	14.3	1
01667	Sodium	7440-23-5	180		106	17.7	1
06969	Tin	7440-31-5	3.75	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,430		1.06	0.180	1
06971	Vanadium	7440-62-2	76.5		1.06	0.117	1
06972	Zinc	7440-66-6	73.9		4.24	0.212	1
10146	Zirconium	7440-67-7	7.01		5.30	0.880	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.131	J	0.424	0.106	2
06142	Silver	7440-22-4	0.0528	J	0.212	0.0212	2
06144	Strontium	7440-24-6	45.0		0.424	0.0360	2
06145	Thallium	7440-28-0	0.311		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0138	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.84		0.0100	0.0100	1
	The pH was measured in water at 23.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	8.4		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	8.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-837-SA5A-SB-4.5-5.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076738
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

837-4 SDG#: PH043-06DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 19:07	John P Hook	5
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:08	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:33	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:33	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:33	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:33	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.58	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.35
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	3.0	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	7.9	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,500		41.0	7.90	1
06944	Antimony	7440-36-0	0.517	J	4.10	0.513	1
06935	Arsenic	7440-38-2	7.84		4.10	0.338	1
06946	Barium	7440-39-3	102		1.03	0.0338	1
06947	Beryllium	7440-41-7	0.884	J	1.03	0.0687	1
07914	Boron	7440-42-8	1.63	J	10.3	0.851	1
06949	Cadmium	7440-43-9	0.187	J	1.03	0.0338	1
01650	Calcium	7440-70-2	2,710		20.5	4.12	1
06951	Chromium	7440-47-3	23.5		3.08	0.0902	1

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.77		1.03	0.0923	1
06953	Copper	7440-50-8	10.6		2.05	0.185	1
01654	Iron	7439-89-6	25,900		41.0	3.90	1
06955	Lead	7439-92-1	8.69		3.08	0.482	1
01656	Lithium	7439-93-2	41.0		4.1	0.56	1
01657	Magnesium	7439-95-4	4,930		10.3	1.77	1
06958	Manganese	7439-96-5	299		1.03	0.0851	1
06960	Molybdenum	7439-98-7	0.770	J	2.05	0.174	1
06961	Nickel	7440-02-0	13.5		2.05	0.113	1
10145	Phosphorus	7723-14-0	323		10.3	0.523	1
01662	Potassium	7440-09-7	1,930		103	13.8	1
01667	Sodium	7440-23-5	123		103	17.1	1
06969	Tin	7440-31-5	3.51	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,240		1.03	0.174	1
06971	Vanadium	7440-62-2	47.2		1.03	0.113	1
06972	Zinc	7440-66-6	52.7		4.10	0.205	1
10146	Zirconium	7440-67-7	5.05	J	5.13	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.126	J	0.410	0.103	2
06142	Silver	7440-22-4	0.0464	J	0.205	0.0205	2
06144	Strontium	7440-24-6	23.4		0.410	0.0349	2
06145	Thallium	7440-28-0	0.274		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.93		0.0100	0.0100	1
	The pH was measured in water at 23.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0465	JQ	1.02	0.0420	1
11031	12378-PeCDD	40321-76-4	0.390	J	5.08	0.0499	1
11031	123478-HxCDD	39227-28-6	0.625	J	5.08	0.0660	1
11031	123678-HxCDD	57653-85-7	1.27	J	5.08	0.0743	1
11031	123789-HxCDD	19408-74-3	1.59	J	5.08	0.0693	1
11031	1234678-HpCDD	35822-46-9	42.3	B	5.08	0.101	1
11031	OCDD	3268-87-9	472	B	10.2	0.0729	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0545	1
11031	12378-PeCDF	57117-41-6	0.261	J	5.08	0.0300	1
11031	23478-PeCDF	57117-31-4	0.171	J	5.08	0.0281	1
11031	123478-HxCDF	70648-26-9	0.342	JB	5.08	0.0583	1
11031	123678-HxCDF	57117-44-9	0.560	JB	5.08	0.0574	1
11031	123789-HxCDF	72918-21-9	0.143	JB	5.08	0.0628	1
11031	234678-HxCDF	60851-34-5	0.529	JB	5.08	0.0587	1
11031	1234678-HpCDF	67562-39-4	11.1	B	5.08	0.0386	1
11031	1234789-HpCDF	55673-89-7	1.08	J	5.08	0.0545	1
11031	OCDF	39001-02-0	44.4	B	10.2	0.0499	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.65				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 15:20	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 02:42	Laura M Krieger	25.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:03	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:03	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 03:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 22:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:57	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:57	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:57	Choon Y Tian	2

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

Sample Description: SL-1237-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076739
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 09:20 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12374 SDG#: PH043-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:57	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: TB-053013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7076740
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 08:00

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB530 SDG#: PH043-08TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13158B20A	06/10/2013 11:29	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13158B20A	06/10/2013 11:29	Laura M Krieger	1

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.71	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.9		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	11		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,200		40.2	7.76	1
06944	Antimony	7440-36-0	0.704	J	4.02	0.503	1
06935	Arsenic	7440-38-2	4.50		4.02	0.332	1
06946	Barium	7440-39-3	134		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.685	J	1.01	0.0674	1
07914	Boron	7440-42-8	2.86	J	10.1	0.835	1
06949	Cadmium	7440-43-9	0.419	J	1.01	0.0332	1
01650	Calcium	7440-70-2	2,440		20.1	4.04	1
06951	Chromium	7440-47-3	22.9		3.02	0.0885	1
06952	Cobalt	7440-48-4	6.63		1.01	0.0905	1
06953	Copper	7440-50-8	13.7		2.01	0.181	1
01654	Iron	7439-89-6	22,000		40.2	3.82	1
06955	Lead	7439-92-1	6.38		3.02	0.473	1
01656	Lithium	7439-93-2	21.6		4.0	0.55	1

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,360		10.1	1.74	1
06958	Manganese	7439-96-5	417		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.543	J	2.01	0.171	1
06961	Nickel	7440-02-0	14.7		2.01	0.111	1
10145	Phosphorus	7723-14-0	389		10.1	0.513	1
01662	Potassium	7440-09-7	4,090		101	13.6	1
01667	Sodium	7440-23-5	94.6	J	101	16.8	1
06969	Tin	7440-31-5	2.90	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,290		1.01	0.171	1
06971	Vanadium	7440-62-2	38.7		1.01	0.111	1
06972	Zinc	7440-66-6	64.2		4.02	0.201	1
10146	Zirconium	7440-67-7	4.18	J	5.03	0.835	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.176	J	0.402	0.101	2
06142	Silver	7440-22-4	0.0589	J	0.201	0.0201	2
06144	Strontium	7440-24-6	34.2		0.402	0.0342	2
06145	Thallium	7440-28-0	0.393		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.58		0.0100	0.0100	1
	The pH was measured in water at 23.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0406	1
11031	12378-PeCDD	40321-76-4	0.135	J	5.11	0.0404	1
11031	123478-HxCDD	39227-28-6	0.0654	JQ	5.11	0.0311	1
11031	123678-HxCDD	57653-85-7	0.273	J	5.11	0.0346	1
11031	123789-HxCDD	19408-74-3	0.308	J	5.11	0.0335	1
11031	1234678-HpCDD	35822-46-9	1.90	JB	5.11	0.0501	1
11031	OCDD	3268-87-9	33.8	B	10.2	0.0388	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0392	1
11031	12378-PeCDF	57117-41-6	0.130	JQ	5.11	0.0217	1
11031	23478-PeCDF	57117-31-4	0.0924	JQ	5.11	0.0207	1
11031	123478-HxCDF	70648-26-9	0.0807	JBQ	5.11	0.0236	1
11031	123678-HxCDF	57117-44-9	0.102	JB	5.11	0.0226	1
11031	123789-HxCDF	72918-21-9	0.303	JB	5.11	0.0266	1
11031	234678-HxCDF	60851-34-5	0.0480	JBQ	5.11	0.0240	1
11031	1234678-HpCDF	67562-39-4	0.273	JB	5.11	0.0164	1
11031	1234789-HpCDF	55673-89-7	0.0563	JQ	5.11	0.0225	1
11031	OCDF	39001-02-0	0.852	JB	10.2	0.0426	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.266				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 15:54	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 03:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/05/2013 23:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:45	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 06:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 06:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 06:59	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 06:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1

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

Sample Description: SL-819-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076741
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:30 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-0 SDG#: PH043-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.13
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	2.5	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	4.9	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,600		43.8	8.45	1
06944	Antimony	7440-36-0	1.24	J	4.38	0.548	1
06935	Arsenic	7440-38-2	4.64		4.38	0.361	1
06946	Barium	7440-39-3	115		1.10	0.0361	1
06947	Beryllium	7440-41-7	1.19		1.10	0.0734	1
07914	Boron	7440-42-8	11.0	U	11.0	0.909	1
06949	Cadmium	7440-43-9	0.0427	J	1.10	0.0361	1
01650	Calcium	7440-70-2	3,430		21.9	4.40	1
06951	Chromium	7440-47-3	38.6		3.29	0.0964	1

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.74		1.10	0.0986	1
06953	Copper	7440-50-8	22.8		2.19	0.197	1
01654	Iron	7439-89-6	39,700		219	20.8	5
06955	Lead	7439-92-1	12.4		3.29	0.515	1
01656	Lithium	7439-93-2	46.7		4.4	0.60	1
01657	Magnesium	7439-95-4	5,270		11.0	1.90	1
06958	Manganese	7439-96-5	167		1.10	0.0909	1
06960	Molybdenum	7439-98-7	1.32	J	2.19	0.186	1
06961	Nickel	7440-02-0	18.6		2.19	0.120	1
10145	Phosphorus	7723-14-0	182		11.0	0.559	1
01662	Potassium	7440-09-7	1,040		110	14.8	1
01667	Sodium	7440-23-5	219		110	18.3	1
06969	Tin	7440-31-5	3.86	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,110		1.10	0.186	1
06971	Vanadium	7440-62-2	72.6		1.10	0.120	1
06972	Zinc	7440-66-6	49.4		4.38	0.219	1
10146	Zirconium	7440-67-7	5.99		5.48	0.909	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.225	J	0.438	0.110	2
06142	Silver	7440-22-4	0.174	J	0.219	0.0219	2
06144	Strontium	7440-24-6	44.7		0.438	0.0372	2
06145	Thallium	7440-28-0	0.293		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0304		0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.85		0.0100	0.0100	1
	The pH was measured in water at 23 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0435	JQ	1.09	0.0376	1
11031	12378-PeCDD	40321-76-4	0.135	JQ	5.46	0.0389	1
11031	123478-HxCDD	39227-28-6	0.0351	J	5.46	0.0285	1
11031	123678-HxCDD	57653-85-7	0.0908	J	5.46	0.0308	1
11031	123789-HxCDD	19408-74-3	0.0711	JQ	5.46	0.0292	1
11031	1234678-HpCDD	35822-46-9	0.259	JB	5.46	0.0335	1
11031	OCDD	3268-87-9	1.60	JB	10.9	0.0380	1
11031	2378-TCDF	51207-31-9	0.0500	JQ	1.09	0.0325	1
11031	12378-PeCDF	57117-41-6	0.173	J	5.46	0.0204	1
11031	23478-PeCDF	57117-31-4	0.146	JQ	5.46	0.0196	1
11031	123478-HxCDF	70648-26-9	0.0810	JB	5.46	0.0195	1
11031	123678-HxCDF	57117-44-9	0.0936	JB	5.46	0.0181	1
11031	123789-HxCDF	72918-21-9	0.0567	JB	5.46	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0760	JBQ	5.46	0.0193	1
11031	1234678-HpCDF	67562-39-4	0.112	JBQ	5.46	0.0128	1
11031	1234789-HpCDF	55673-89-7	0.0565	JQ	5.46	0.0203	1
11031	OCDF	39001-02-0	0.259	JB	10.9	0.0462	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0441				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	98	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 16:27	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 03:20	Laura M Krieger	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:05	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:05	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 04:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/06/2013 00:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 19:23	John P Hook	5
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:49	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 07:01	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 07:01	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 07:01	Choon Y Tian	2

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

Sample Description: SL-819-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076742
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 14:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

819-6 SDG#: PH043-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 07:01	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.73	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.2	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.2	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.74	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.3	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,700		39.6	7.63	1
06944	Antimony	7440-36-0	0.565	J	3.96	0.495	1
06935	Arsenic	7440-38-2	4.33		3.96	0.327	1
06946	Barium	7440-39-3	89.0		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.516	J	0.990	0.0663	1
07914	Boron	7440-42-8	2.49	J	9.90	0.821	1
06949	Cadmium	7440-43-9	0.269	J	0.990	0.0327	1
01650	Calcium	7440-70-2	1,820		19.8	3.98	1
06951	Chromium	7440-47-3	16.7		2.97	0.0871	1
06952	Cobalt	7440-48-4	4.91		0.990	0.0891	1
06953	Copper	7440-50-8	8.83		1.98	0.178	1
01654	Iron	7439-89-6	16,300		39.6	3.76	1
06955	Lead	7439-92-1	7.05		2.97	0.465	1
01656	Lithium	7439-93-2	17.0		4.0	0.54	1

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,140		9.90	1.71	1
06958	Manganese	7439-96-5	292		0.990	0.0821	1
06960	Molybdenum	7439-98-7	0.402	J	1.98	0.168	1
06961	Nickel	7440-02-0	10.2		1.98	0.109	1
10145	Phosphorus	7723-14-0	357		9.90	0.505	1
01662	Potassium	7440-09-7	3,150		99.0	13.4	1
01667	Sodium	7440-23-5	69.4	J	99.0	16.5	1
06969	Tin	7440-31-5	2.65	J	9.90	0.218	1
06970	Titanium	7440-32-6	999		0.990	0.168	1
06971	Vanadium	7440-62-2	28.8		0.990	0.109	1
06972	Zinc	7440-66-6	46.2		3.96	0.198	1
10146	Zirconium	7440-67-7	3.36	J	4.95	0.821	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.0998	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0443	J	0.198	0.0198	2
06144	Strontium	7440-24-6	18.3		0.396	0.0336	2
06145	Thallium	7440-28-0	0.217		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.46		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0601	JQ	0.995	0.0373	1
11031	12378-PeCDD	40321-76-4	0.305	JQ	4.98	0.0499	1
11031	123478-HxCDD	39227-28-6	0.335	JQ	4.98	0.0643	1
11031	123678-HxCDD	57653-85-7	0.807	JQ	4.98	0.0697	1
11031	123789-HxCDD	19408-74-3	0.988	J	4.98	0.0679	1
11031	1234678-HpCDD	35822-46-9	18.5	B	4.98	0.0784	1
11031	OCDD	3268-87-9	247	B	9.95	0.0696	1
11031	2378-TCDF	51207-31-9	0.0775	JQ	0.995	0.0518	1
11031	12378-PeCDF	57117-41-6	0.383	JQ	4.98	0.0284	1
11031	23478-PeCDF	57117-31-4	0.273	JQ	4.98	0.0257	1
11031	123478-HxCDF	70648-26-9	0.273	JBQ	4.98	0.0516	1
11031	123678-HxCDF	57117-44-9	0.229	JBQ	4.98	0.0501	1
11031	123789-HxCDF	72918-21-9	0.232	JBQ	4.98	0.0565	1
11031	234678-HxCDF	60851-34-5	0.274	JB	4.98	0.0491	1
11031	1234678-HpCDF	67562-39-4	4.16	JB	4.98	0.0285	1
11031	1234789-HpCDF	55673-89-7	0.345	JQ	4.98	0.0417	1
11031	OCDF	39001-02-0	15.6	B	9.95	0.0456	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.432				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 17:01	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 04:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/06/2013 01:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:53	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 07:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 07:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 07:04	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 07:04	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1

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

Sample Description: SL-833-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076743
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:45 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-0 SDG#: PH043-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.3
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	2.9	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	4.7	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		41.3	7.95	1
06944	Antimony	7440-36-0	4.92		4.13	0.516	1
06935	Arsenic	7440-38-2	3.53	J	4.13	0.340	1
06946	Barium	7440-39-3	93.7		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.673	J	1.03	0.0691	1
07914	Boron	7440-42-8	1.66	J	10.3	0.856	1
06949	Cadmium	7440-43-9	1.09		1.03	0.0340	1
01650	Calcium	7440-70-2	2,050		20.6	4.15	1
06951	Chromium	7440-47-3	20.6		3.09	0.0908	1

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	7.52		1.03	0.0928	1
06953	Copper	7440-50-8	9.55		2.06	0.186	1
01654	Iron	7439-89-6	21,300		41.3	3.92	1
06955	Lead	7439-92-1	6.10		3.09	0.485	1
01656	Lithium	7439-93-2	21.3		4.1	0.57	1
01657	Magnesium	7439-95-4	4,130		10.3	1.78	1
06958	Manganese	7439-96-5	305		1.03	0.0856	1
06960	Molybdenum	7439-98-7	2.74		2.06	0.175	1
06961	Nickel	7440-02-0	10.8		2.06	0.113	1
10145	Phosphorus	7723-14-0	511		10.3	0.526	1
01662	Potassium	7440-09-7	2,690		103	13.9	1
01667	Sodium	7440-23-5	84.3	J	103	17.2	1
06969	Tin	7440-31-5	8.14	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,080		1.03	0.175	1
06971	Vanadium	7440-62-2	37.2		1.03	0.113	1
06972	Zinc	7440-66-6	49.2		4.13	0.206	1
10146	Zirconium	7440-67-7	4.10	J	5.16	0.856	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0338	J	0.206	0.0206	2
06144	Strontium	7440-24-6	20.3		0.413	0.0351	2
06145	Thallium	7440-28-0	0.278		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.89		0.0100	0.0100	1
	The pH was measured in water at 23 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0418	1
11031	12378-PeCDD	40321-76-4	0.0449	JQ	5.09	0.0363	1
11031	123478-HxCDD	39227-28-6	5.09	U	5.09	0.0234	1
11031	123678-HxCDD	57653-85-7	0.0704	JQ	5.09	0.0244	1
11031	123789-HxCDD	19408-74-3	0.114	J	5.09	0.0255	1
11031	1234678-HpCDD	35822-46-9	0.108	JBQ	5.09	0.0271	1
11031	OCDD	3268-87-9	0.673	JB	10.2	0.0325	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0376	1
11031	12378-PeCDF	57117-41-6	0.103	JQ	5.09	0.0199	1
11031	23478-PeCDF	57117-31-4	0.0656	JQ	5.09	0.0186	1
11031	123478-HxCDF	70648-26-9	0.0495	JBQ	5.09	0.0185	1
11031	123678-HxCDF	57117-44-9	0.0512	JBQ	5.09	0.0173	1
11031	123789-HxCDF	72918-21-9	0.0742	JBQ	5.09	0.0213	1
11031	234678-HxCDF	60851-34-5	0.0262	JBQ	5.09	0.0172	1
11031	1234678-HpCDF	67562-39-4	0.0447	JBQ	5.09	0.0109	1
11031	1234789-HpCDF	55673-89-7	0.0327	JQ	5.09	0.0177	1
11031	OCDF	39001-02-0	0.123	JB	10.2	0.0420	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0117				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 17:35	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 03:59	Laura M Krieger	25.3
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:06	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:06	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 04:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/06/2013 02:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 19:27	John P Hook	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 19:27	John P Hook	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 11:56	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 07:06	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 07:06	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 07:06	Choon Y Tian	2

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

Sample Description: SL-833-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076744
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:55 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

833-2 SDG#: PH043-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 07:06	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401A	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.76	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	0.91	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	3.8	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	9.7	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		40.7	7.84	1
06944	Antimony	7440-36-0	0.563	J	4.07	0.508	1
06935	Arsenic	7440-38-2	4.83		4.07	0.335	1
06946	Barium	7440-39-3	97.4		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.545	J	1.02	0.0681	1
07914	Boron	7440-42-8	2.52	J	10.2	0.844	1
06949	Cadmium	7440-43-9	0.307	J	1.02	0.0335	1
01650	Calcium	7440-70-2	1,970		20.3	4.09	1
06951	Chromium	7440-47-3	18.1		3.05	0.0895	1
06952	Cobalt	7440-48-4	5.41		1.02	0.0915	1
06953	Copper	7440-50-8	10.2		2.03	0.183	1
01654	Iron	7439-89-6	17,800		40.7	3.86	1
06955	Lead	7439-92-1	7.26		3.05	0.478	1
01656	Lithium	7439-93-2	18.2		4.1	0.56	1

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,420		10.2	1.76	1
06958	Manganese	7439-96-5	316		1.02	0.0844	1
06960	Molybdenum	7439-98-7	0.413	J	2.03	0.173	1
06961	Nickel	7440-02-0	11.2		2.03	0.112	1
10145	Phosphorus	7723-14-0	376		10.2	0.518	1
01662	Potassium	7440-09-7	3,290		102	13.7	1
01667	Sodium	7440-23-5	74.5	J	102	17.0	1
06969	Tin	7440-31-5	2.64	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,040		1.02	0.173	1
06971	Vanadium	7440-62-2	31.2		1.02	0.112	1
06972	Zinc	7440-66-6	50.7		4.07	0.203	1
10146	Zirconium	7440-67-7	3.52	J	5.08	0.844	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0456	J	0.203	0.0203	2
06144	Strontium	7440-24-6	22.6		0.407	0.0346	2
06145	Thallium	7440-28-0	0.283		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.15		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	2378-TCDD		1746-01-6	1.01	U	1.01	0.0421	1
11031	12378-PeCDD		40321-76-4	0.104	JQ	5.04	0.0507	1
11031	123478-HxCDD		39227-28-6	0.227	J	5.04	0.0605	1
11031	123678-HxCDD		57653-85-7	0.608	J	5.04	0.0663	1
11031	123789-HxCDD		19408-74-3	0.749	J	5.04	0.0625	1
11031	1234678-HpCDD		35822-46-9	17.9	B	5.04	0.0880	1
11031	OCDD		3268-87-9	257	B	10.1	0.0594	1
11031	2378-TCDF		51207-31-9	0.132	JQ	1.01	0.0522	1
11031	12378-PeCDF		57117-41-6	0.210	J	5.04	0.0276	1
11031	23478-PeCDF		57117-31-4	0.173	J	5.04	0.0265	1
11031	123478-HxCDF		70648-26-9	0.163	JB	5.04	0.0430	1
11031	123678-HxCDF		57117-44-9	0.155	JBQ	5.04	0.0407	1
11031	123789-HxCDF		72918-21-9	0.218	JBQ	5.04	0.0529	1
11031	234678-HxCDF		60851-34-5	0.228	JB	5.04	0.0454	1
11031	1234678-HpCDF		67562-39-4	4.03	JB	5.04	0.0271	1
11031	1234789-HpCDF		55673-89-7	0.329	J	5.04	0.0416	1
11031	OCDF		39001-02-0	15.2	B	10.1	0.0454	1
Toxic Equivalents	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	0.560				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 18:08	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 05:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/06/2013 03:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 12:00	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 07:08	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 07:08	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 07:08	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 07:08	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1

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

Sample Description: SL-834-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076745
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:00 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-0 SDG#: PH043-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401B	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.2
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	4.8	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,700		41.3	7.97	1
06944	Antimony	7440-36-0	0.954	J	4.13	0.517	1
06935	Arsenic	7440-38-2	5.38		4.13	0.341	1
06946	Barium	7440-39-3	96.0		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.781	J	1.03	0.0692	1
07914	Boron	7440-42-8	2.18	J	10.3	0.858	1
06949	Cadmium	7440-43-9	0.207	J	1.03	0.0341	1
01650	Calcium	7440-70-2	2,200		20.7	4.15	1
06951	Chromium	7440-47-3	22.5		3.10	0.0909	1

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.62		1.03	0.0930	1
06953	Copper	7440-50-8	10.1		2.07	0.186	1
01654	Iron	7439-89-6	23,800		41.3	3.93	1
06955	Lead	7439-92-1	6.80		3.10	0.486	1
01656	Lithium	7439-93-2	26.0		4.1	0.57	1
01657	Magnesium	7439-95-4	4,360		10.3	1.79	1
06958	Manganese	7439-96-5	326		1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.562	J	2.07	0.176	1
06961	Nickel	7440-02-0	12.5		2.07	0.114	1
10145	Phosphorus	7723-14-0	342		10.3	0.527	1
01662	Potassium	7440-09-7	2,780		103	14.0	1
01667	Sodium	7440-23-5	88.5	J	103	17.3	1
06969	Tin	7440-31-5	2.94	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,270		1.03	0.176	1
06971	Vanadium	7440-62-2	43.0		1.03	0.114	1
06972	Zinc	7440-66-6	50.8		4.13	0.207	1
10146	Zirconium	7440-67-7	4.74	J	5.17	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.110	J	0.413	0.103	2
06142	Silver	7440-22-4	0.0541	J	0.207	0.0207	2
06144	Strontium	7440-24-6	22.6		0.413	0.0351	2
06145	Thallium	7440-28-0	0.328		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.95		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0344	1
11031	12378-PeCDD	40321-76-4	5.17	U	5.17	0.0339	1
11031	123478-HxCDD	39227-28-6	5.17	U	5.17	0.0196	1
11031	123678-HxCDD	57653-85-7	0.0465	JQ	5.17	0.0210	1
11031	123789-HxCDD	19408-74-3	0.136	J	5.17	0.0211	1
11031	1234678-HpCDD	35822-46-9	0.113	JB	5.17	0.0249	1
11031	OCDD	3268-87-9	0.612	JBQ	10.3	0.0273	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0285	1
11031	12378-PeCDF	57117-41-6	0.0531	JQ	5.17	0.0158	1
11031	23478-PeCDF	57117-31-4	5.17	U	5.17	0.0150	1
11031	123478-HxCDF	70648-26-9	0.0316	JBQ	5.17	0.0131	1
11031	123678-HxCDF	57117-44-9	0.0195	JBQ	5.17	0.0131	1
11031	123789-HxCDF	72918-21-9	0.0625	JB	5.17	0.0147	1
11031	234678-HxCDF	60851-34-5	0.0128	JBQ	5.17	0.0121	1
11031	1234678-HpCDF	67562-39-4	0.0472	JB	5.17	0.00924	1
11031	1234789-HpCDF	55673-89-7	0.0311	J	5.17	0.0131	1
11031	OCDF	39001-02-0	0.0750	JBQ	10.3	0.0327	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0217				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13155SLE026	06/10/2013 18:41	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13155SLE026	06/04/2013 16:25	JoElla L Rice	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13155A16A	06/05/2013 04:37	Laura M Krieger	25.2
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315131274	05/31/2013 17:08	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315131274	05/31/2013 17:08	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131550003A	06/06/2013 05:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131550003A	06/04/2013 16:35	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13154001	06/06/2013 04:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13154001	06/03/2013 10:30	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131560637001	06/06/2013 12:04	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131560637001B	06/11/2013 07:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131560637001A	06/11/2013 07:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131560637001A	06/11/2013 07:11	Choon Y Tian	2

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

Sample Description: SL-834-SA5A-SB-2.4-3.4 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7076746
LLI Group # 1393848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/30/2013 13:10 by VC

Submitted: 05/31/2013 09:20
Reported: 06/11/2013 15:20

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

834-2 SDG#: PH043-14*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131560637001A	06/11/2013 07:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131560638002	06/07/2013 11:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131560637001	06/05/2013 22:36	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131560638002	06/06/2013 01:30	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13151039401B	05/31/2013 22:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162401B	06/04/2013 19:06	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13155SLE026	Sample number(s): 7076732-7076737,7076739,7076741-7076746									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	92		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	93		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	100		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	104		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	90		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	88		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	99		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	90		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	88		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	86		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	94		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	94		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	94		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	91		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13155WAC026	Sample number(s): 7076730									
Acenaphthene	0.050	U	0.050	0.010	ug/l	102	98	65-124	4	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	103	100	72-113	3	30
Anthracene	0.050	U	0.050	0.010	ug/l	104	101	70-117	3	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	102	101	75-115	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	99	72-120	5	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	106	74-130	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	99	95	70-130	4	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	105	97	63-121	7	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	107	101	74-118	6	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	91	91	40-138	0	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	104	100	70-145	4	30
Chrysene	0.050	U	0.050	0.010	ug/l	101	98	75-112	4	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	97	91	66-122	6	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	103	101	74-129	2	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	101	99	40-119	1	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.17	J	1.0	0.050	ug/l	75	73	70-143	3	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	102	99	73-116	3	30
Fluorene	0.050	U	0.050	0.010	ug/l	103	98	74-115	5	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	100	92	66-122	8	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	115	109	71-120	5	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	118	113	74-119	5	30
Naphthalene	0.050	U	0.050	0.030	ug/l	103	98	67-118	5	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	67	65	36-120	4	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	67	60	57-145	12	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	99	96	72-109	3	30
Pyrene	0.050	U	0.050	0.010	ug/l	103	104	71-116	1	30
Batch number: 13155A16A	Sample number(s): 7076733,7076735-7076737,7076739,7076742,7076744,7076746									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92		67-119		
Batch number: 13158B20A	Sample number(s): 7076730,7076740									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	108	103	75-135	4	30
Batch number: 131540033A	Sample number(s): 7076730									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	93	93	70-130	0	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	98	101	70-130	3	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	100	102	70-130	2	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	96	98	70-130	2	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	72	72	70-130	0	30
Batch number: 131550003A	Sample number(s): 7076731-7076737,7076739,7076741-7076746									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	92		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 131560635001	Sample number(s): 7076730									
Aluminum	0.400	U	0.400	0.0743	mg/l	101	100	90-112	1	20
Antimony	0.0037	J	0.0400	0.0035	mg/l	101	103	88-111	2	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	98	97	90-113	1	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	98	99	88-110	1	20
Boron	0.100	U	0.100	0.0083	mg/l	96	97	89-110	0	20
Cadmium	0.0100	U	0.0100	0.00036	mg/l	100	100	90-112	1	20
Calcium	0.0711	J	0.400	0.0640	mg/l	102	102	90-110	0	20
Chromium	0.0300	U	0.0300	0.0011	mg/l	99	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.00066	mg/l	101	102	90-110	1	20
Copper	0.0200	U	0.0200	0.0021	mg/l	96	97	90-112	2	20
Iron	0.400	U	0.400	0.0333	mg/l	97	98	90-112	0	20
Lead	0.0300	U	0.0300	0.0051	mg/l	104	105	88-110	1	20
Lithium	0.0400	U	0.0400	0.0060	mg/l	101	101	90-110	0	20
Magnesium	0.200	U	0.200	0.0606	mg/l	99	100	90-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	100	100	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0029	mg/l	101	102	90-110	1	20
Nickel	0.0200	U	0.0200	0.0011	mg/l	102	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0052	mg/l	99	100	90-110	1	20
Potassium	1.00	U	1.00	0.145	mg/l	99	99	85-115	0	20
Sodium	2.00	U	2.00	0.167	mg/l	98	98	87-114	1	20
Tin	0.0400	U	0.0400	0.0022	mg/l	98	99	90-110	1	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	101	102	90-113	1	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vanadium	0.0100	U	0.0100	0.0013	mg/l	101	101	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	100	101	90-110	1	20
Zirconium	0.100	U	0.100	0.0092	mg/l	100	101	90-110	0	20
Batch number: 131560637001	Sample number(s): 7076732-7076739,7076741-7076746									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	0.524	J	4.00	0.500	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Calcium	10.9	J	20.0	4.02	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	106		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	106		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	108		80-120		
Phosphorus	1.47	J	10.0	0.510	mg/kg	105		80-120		
Potassium	100 U		100.	13.5	mg/kg	101		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.50	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	106		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	106		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	106		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	105		80-120		
Batch number: 131560637001A	Sample number(s): 7076732-7076739,7076741-7076746									
Silver	0.200	U	0.200	0.0200	mg/kg	113		80-120		
Strontium	0.0562	J	0.400	0.0340	mg/kg	109		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	108		80-120		
Batch number: 131560637001B	Sample number(s): 7076732-7076739,7076741-7076746									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 131560638002	Sample number(s): 7076732-7076739,7076741-7076746									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	96		85-120		
Batch number: 131560639001A	Sample number(s): 7076730									
Silver	0.0010	U	0.0010	0.00010	mg/l	101	99	90-115	1	20
Strontium	0.0020	U	0.0020	0.00022	mg/l	101	99	80-120	2	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	101	102	80-120	1	20
Batch number: 131560639001B	Sample number(s): 7076730									
Selenium	0.0040	U	0.0040	0.00050	mg/l	102	102	80-120	0	20
Batch number: 131575713007	Sample number(s): 7076730									
3b Mercury 7470A	0.00020	U	0.00020	0.00007 0	mg/l	98	95	90-115	3	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13151039401A	Sample number(s): 7076732-7076735,7076738-7076739,7076741-7076744								
15a pH by 9045D					100		95-105		
Batch number: 13151039401B	Sample number(s): 7076745-7076746								
15a pH by 9045D					100		95-105		
Batch number: 13151121522A	Sample number(s): 7076730								
28b. pH (9040B and 9040C)					100	100	99-103	0	3
Batch number: 13155162401B	Sample number(s): 7076731-7076739,7076741-7076746								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13154001	Sample number(s): 7076732-7076737,7076739,7076741-7076746									
2378-TCDD	1.00	U	1.00	0.0476	ng/kg	106		67-158		
12378-PeCDD	5.00	U	5.00	0.0433	ng/kg	99		70-142		
123478-HxCDD	5.00	U	5.00	0.0252	ng/kg	96		70-164		
123678-HxCDD	5.00	U	5.00	0.0278	ng/kg	96		76-134		
123789-HxCDD	5.00	U	5.00	0.0274	ng/kg	99		64-162		
1234678-HpCDD	0.0620	J	5.00	0.0313	ng/kg	94		70-140		
OCDD	0.267	J	10.0	0.0380	ng/kg	92		78-144		
2378-TCDF	1.00	U	1.00	0.0504	ng/kg	104		75-158		
12378-PeCDF	5.00	U	5.00	0.0231	ng/kg	99		80-134		
23478-PeCDF	5.00	U	5.00	0.0216	ng/kg	98		68-160		
123478-HxCDF	0.0303	J	5.00	0.0175	ng/kg	93		72-134		
123678-HxCDF	0.0202	J	5.00	0.0160	ng/kg	92		84-130		
123789-HxCDF	0.0236	J	5.00	0.0184	ng/kg	91		78-130		
234678-HxCDF	0.0317	J	5.00	0.0158	ng/kg	95		70-156		
1234678-HpCDF	0.0289	J	5.00	0.00958	ng/kg	89		82-122		
1234789-HpCDF	5.00	U	5.00	0.0151	ng/kg	93		78-138		
OCDF	0.0812	J	10.0	0.0450	ng/kg	90		63-170		
Batch number: 13155003	Sample number(s): 7076730									
2378-TCDD	0.133	J	2.00	0.127	pg/l	92		60-150		
12378-PeCDD	0.271	J	10.0	0.108	pg/l	95		60-150		
123478-HxCDD	0.226	J	10.0	0.0965	pg/l	101		60-150		
123678-HxCDD	0.224	J	10.0	0.102	pg/l	98		60-150		
123789-HxCDD	0.103	J	10.0	0.0986	pg/l	99		60-150		
1234678-HpCDD	0.337	J	10.0	0.110	pg/l	97		60-150		
OCDD	0.859	J	20.0	0.0862	pg/l	98		60-150		
2378-TCDF	2.00	U	2.00	0.0983	pg/l	94		60-150		
12378-PeCDF	0.516	J	10.0	0.0791	pg/l	99		60-150		
23478-PeCDF	0.268	J	10.0	0.0743	pg/l	99		60-150		
123478-HxCDF	0.339	J	10.0	0.0697	pg/l	103		60-150		
123678-HxCDF	0.205	J	10.0	0.0686	pg/l	100		60-150		
123789-HxCDF	0.297	J	10.0	0.0716	pg/l	100		60-150		
234678-HxCDF	0.203	J	10.0	0.0669	pg/l	101		60-150		
1234678-HpCDF	0.359	J	10.0	0.0442	pg/l	102		60-150		
1234789-HpCDF	0.195	J	10.0	0.0533	pg/l	100		60-150		
OCDF	0.843	J	20.0	0.132	pg/l	96		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13154001	Sample number(s): 7076732-7076737,7076739,7076741-7076746								
TEQ WHO 2005 - EDLx0.0	0.000393			ng/kg					
Batch number: 13155003	Sample number(s): 7076730								
TEQ WHO 2005 - EDLx0.0	0.0300			pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13155SLE026	Sample number(s): 7076732-7076737,7076739,7076741-7076746 UNSPK: 7076735								
Acenaphthene	81	88	48-127	8	30				
Acenaphthylene	80	87	49-121	8	30				
Anthracene	79	91	52-126	15	30				
Benzo(a)anthracene	84	105	32-135	23	30				
Benzo(a)pyrene	83	105	36-138	23	30				
Benzo(b)fluoranthene	105	136	26-142	25	30				
Benzo(e)pyrene	76	96	70-130	23	30				
Benzo(g,h,i)perylene	62	75	33-141	18	30				
Benzo(k)fluoranthene	80	105	47-129	27	30				
Butylbenzylphthalate	74	87	59-153	16	30				
Di-n-butylphthalate	77	93	62-154	18	30				
Chrysene	82	101	29-148	21	30				
Dibenz(a,h)anthracene	71	87	34-125	20	30				
Diethylphthalate	85	166*	76-127	65*	30				
Dimethylphthalate	88	100	62-136	12	30				
Bis(2-Ethylhexyl)phthalate	-5*	14*	39-167	23	30				
Fluoranthene	84	104	47-135	21	30				
Fluorene	83	95	50-129	14	30				
Indeno(1,2,3-cd)pyrene	69	85	17-136	20	30				
1-Methylnaphthalene	79	87	50-131	9	30				
2-Methylnaphthalene	78	85	28-144	9	30				
Naphthalene	87	91	31-148	5	30				
N-Nitrosodimethylamine	94	94	48-113	0	30				
Di-n-octylphthalate	80	121	52-162	41*	30				
Phenanthrene	76	90	29-142	16	30				
Pyrene	78	91	26-143	15	30				
Batch number: 13155A16A	Sample number(s): 7076733,7076735-7076737,7076739,7076742,7076744,7076746 UNSPK: 7076735								
11a TPH by EPA 8015B GRO	96	110	39-118	19	30				
Batch number: 131550003A	Sample number(s): 7076731-7076737,7076739,7076741-7076746 UNSPK: 7076735								
EFH (C12-C14)	84	89	49-123	6	20				
EFH (C15-C20)	157*	122	49-123	25*	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C21-C30)	118	68	49-123	29*	20				
EFH (C30-C40)	52	6*	49-123	21*	20				
EFH (C8-C11)	75	221*	49-123	99*	20				
Batch number: 131560637001	Sample number(s): 7076732-7076739,7076741-7076746 UNSPK: 7076735 BKG: 7076735								
Aluminum	2206 (2)	2079 (2)	75-125	1	20	30,900	30,000	3	20
Antimony	63*	62*	75-125	2	20	1.12 J	1.50 J	29* (1)	20
Arsenic	106	99	75-125	6	20	3.43 J	4.85	34* (1)	20
Barium	95	96	75-125	1	20	157	141	11	20
Beryllium	102	102	75-125	0	20	1.52	1.43	6 (1)	20
Boron	97	95	75-125	3	20	9.71 U	9.71 U	0 (1)	20
Cadmium	95	93	75-125	2	20	0.0359 J	0.0699 J	64* (1)	20
Calcium	78 (2)	133 (2)	75-125	4	20	4,890	4,570	7	20
Chromium	102	113	75-125	3	20	46.9	45.0	4	20
Cobalt	85	87	75-125	1	20	12.0	7.67	44*	20
Copper	97	105	75-125	3	20	26.3	22.9	14	20
Iron	-2572 (2)	544 (2)	75-125	8	20	39,400	36,700	7	20
Lead	75	83	75-125	5	20	17.0	14.1	19 (1)	20
Lithium	105	105	75-125	0	20	55.9	54.1	3	20
Magnesium	-74 (2)	161 (2)	75-125	5	20	9,190	8,450	8	20
Manganese	-233 (2)	-155 (2)	75-125	10	20	475	344	32*	20
Molybdenum	95	95	75-125	1	20	0.661 J	0.531 J	22* (1)	20
Nickel	91	94	75-125	2	20	24.7	22.1	11	20
Phosphorus	63 (2)	82 (2)	75-125	4	20	425	363	16	20
Potassium	162*	161*	75-125	0	20	1,830	1,680	9	20
Sodium	99	99	75-125	0	20	174	165	5 (1)	20
Tin	89	89	75-125	1	20	3.60 J	3.44 J	5 (1)	20
Titanium	361 (2)	342 (2)	75-125	1	20	1,340	1,310	2	20
Vanadium	99	109	75-125	4	20	75.4	70.1	7	20
Zinc	96	103	75-125	3	20	73.9	67.7	9	20
Zirconium	99	98	75-125	1	20	6.32	6.42	2 (1)	20
Batch number: 131560637001A	Sample number(s): 7076732-7076739,7076741-7076746 UNSPK: 7076735 BKG: 7076735								
Silver	114	115	75-125	1	20	0.0418 J	0.0484 J	15 (1)	20
Strontium	106 (2)	118 (2)	75-125	2	20	41.8	41.2	1	20
Thallium	108	105	75-125	2	20	0.283	0.285	1 (1)	20
Batch number: 131560637001B	Sample number(s): 7076732-7076739,7076741-7076746 UNSPK: 7076735 BKG: 7076735								
Selenium	107	102	75-125	5	20	0.136 J	0.120 J	13 (1)	20
Batch number: 131560638002	Sample number(s): 7076732-7076739,7076741-7076746 UNSPK: 7076735 BKG: 7076735								
3a Mercury 7471A	99	100	65-135	1	20	0.0140 J	0.0126 J	10 (1)	20
Batch number: 13151039401A	Sample number(s): 7076732-7076735,7076738-7076739,7076741-7076744 BKG: 7076735								
15a pH by 9045D						6.83	6.84	0	3
Batch number: 13151039401B	Sample number(s): 7076745-7076746 BKG: 7076746								
15a pH by 9045D						6.95	6.97	0	3

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13155162401B	Sample number(s): 7076731-7076739,7076741-7076746					BKG: 7076735			
14a Moisture Content by 160.3						8.4	8.7	4	20
14a Moisture Content by 160.3						8.4	8.7	4	20
14a Moisture Content by 160.3						8.4	8.7	4	20
Batch number: 13154001	Sample number(s): 7076732-7076737,7076739,7076741-7076746 UNSPK: 7076735								
2378-TCDD	102	106	40-135	4	20				
12378-PeCDD	98	99	40-135	1	20				
123478-HxCDD	96	95	40-135	1	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	100	95	40-135	5	20				
1234678-HpCDD	90	90	40-135	1	20				
OCDD	64	66	40-135	1	20				
2378-TCDF	108	102	40-135	6	20				
12378-PeCDF	101	100	40-135	1	20				
23478-PeCDF	97	99	40-135	2	20				
123478-HxCDF	92	92	40-135	0	20				
123678-HxCDF	93	93	40-135	0	20				
123789-HxCDF	92	91	40-135	0	20				
234678-HxCDF	92	92	40-135	1	20				
1234678-HpCDF	91	90	40-135	0	20				
1234789-HpCDF	92	92	40-135	0	20				
OCDF	87	88	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13155SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7076732	86	88	92
7076733	68	64	75
7076734	80	84	89
7076735	74	76	80
7076736	69	70	83
7076737	87	92	94
7076739	76	82	84
7076741	69	71	79
7076742	84	84	87
7076743	78	78	81
7076744	81	81	83
7076745	76	75	79
7076746	81	82	89
Blank	83	89	92
LCS	83	90	93

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Surrogate Quality Control

MS	69	70	83
MSD	87	92	94
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13155WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7076730	99	101	106
Blank	93	102	100
LCS	98	111	112
LCSD	95	103	106
Limits:	64-120	62-141	58-134

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13155A16A

	Trifluorotoluene-F
7076733	96
7076735	101
7076736	86
7076737	85
7076739	84
7076742	87
7076744	79
7076746	82
Blank	91
LCS	89
MS	86
MSD	85
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13158B20A

	Trifluorotoluene-F
7076730	82
7076740	81
Blank	81
LCS	117
LCSD	113
Limits:	63-135

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131540033A

	Chlorobenzene	Orthoterphenyl
7076730	101	91
Blank	98	85
LCS	93	91
LCSD	95	93

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Surrogate Quality Control

Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131550003A

	Chlorobenzene	Orthoterphenyl
7076731	95	95
7076732	93	94
7076733	90	94
7076734	91	86
7076735	91	91
7076736	91	84
7076737	124	90
7076739	90	94
7076741	93	93
7076742	85	82
7076743	91	94
7076744	90	93
7076745	90	93
7076746	96	98
Blank	98	90
LCS	97	97
MS	91	84
MSD	124	90
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13154001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7076732	78	105	78	80	77	75
7076733	69	92	72	75	72	75
7076734	71	97	79	80	76	75
7076735	65	101	77	80	77	81
7076736	31	48	38	38	37	35
7076737	60	95	72	75	74	73
7076739	58	73	66	67	64	64
7076741	65	81	67	69	67	66
7076742	76	94	78	84	77	77
7076743	67	94	73	75	71	71
7076744	58	77	63	66	62	61
7076745	65	78	68	72	65	62
7076746	60	84	68	70	68	64
Blank	63	95	78	84	83	84
MS	31	48	38	38	37	35
MSD	60	95	72	75	74	73
OPR	65	92	75	79	75	77
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7076732	87	72	76	99	78	78
7076733	80	73	73	87	72	72

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Quality Control Summary

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Reported: 06/11/13 at 03:20 PM

Surrogate Quality Control

7076734	86	79	84	92	76	77
7076735	86	78	81	92	79	78
7076736	43	37	40	45	36	36
7076737	88	75	80	87	76	75
7076739	72	61	62	75	74	73
7076741	74	65	66	82	75	74
7076742	91	70	68	95	87	86
7076743	83	67	65	91	76	77
7076744	77	59	59	78	69	72
7076745	79	63	67	81	74	74
7076746	80	66	65	81	73	74
Blank	100	77	81	90	88	84
MS	43	37	40	45	36	36
MSD	88	75	80	87	76	75
OPR	94	76	82	89	80	82

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7076732	73	75	88	82	107	
7076733	71	75	82	73	90	
7076734	76	83	97	76	100	
7076735	78	80	89	76	99	
7076736	35	39	45	33	48	
7076737	75	77	91	69	93	
7076739	71	72	77	59	74	
7076741	72	74	80	69	83	
7076742	85	84	87	79	98	
7076743	74	75	84	73	95	
7076744	69	73	79	60	79	
7076745	72	75	86	68	81	
7076746	71	75	81	63	85	
Blank	85	86	97	66	98	
MS	35	39	45	33	48	
MSD	75	77	91	69	93	
OPR	79	86	99	68	92	

Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13155003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7076730	77	79	87	87	85	93
Blank	75	83	92	90	90	97
OPR	67	78	86	86	85	94

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7076730	85	80	76	80	87	88
Blank	90	85	80	83	92	90
OPR	86	83	78	79	87	87

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1393848
Reported: 06/11/13 at 03:20 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7076730	85	83	78	77	78	
Blank	89	88	84	77	80	
OPR	86	86	81	73	76	
Limits:	28-130	23-140	17-157	24-169	24-185	

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acct#13013 Gp#1393848 Sample# 7076730-46

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/30/2013
CarrierName: FedEx
AirbillNo: 799885359473

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130530-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-053013	5/30/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																													
EB-053013	5/30/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																										
EB-053013	5/30/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																								
EB-053013	5/30/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																		
EB-053013	5/30/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																				X												
EB-053013	5/30/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X											

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Myers	05/30/13	1600									
									Patty	5/31/13	0920

COC Rev 2

COC: 20130530-01, Page 1 of 1

acct#13013 Cp#1393848 Sample#7076730-46

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/30/2013
CarrierName: FedEx
AirbillNo: 799885359473

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130530-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-835-SA5A-SB-0.0-0.5	5/30/13 10:55	SO	None	1 - SS-Sleeve	10 day																				X											
SL-836-SA5A-SB-0.0-0.5	5/30/13 10:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-836-SA5A-SB-0.0-0.5	5/30/13 10:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-836-SA5A-SB-2.5-3.5	5/30/13 10:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-836-SA5A-SB-2.5-3.5	5/30/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-837-SA5A-SB-0.0-0.5	5/30/13 08:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-837-SA5A-SB-0.0-0.5	5/30/13 08:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-837-SA5A-SB-4.5-5.5MS	5/30/13 09:10	SO	None	6 - 16 oz glass	10 day	X	X					X		X											X											MS/MSD
SL-837-SA5A-SB-4.5-5.5MS	5/30/13 09:10	SO	None	1 - 8 oz glass	10 day													X																		MS/MSD
SL-1237-SA5A-SB-4.5-5.5	5/30/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-1237-SA5A-SB-4.5-5.5	5/30/13 09:20	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cooke

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mysel	05/30/13	1600					1				
										5/31/13	0920

Acct#13013 Ap#1393848 Sample#7076730-46

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/30/2013
CarrierName: FedEx
AirbillNo: 799885359473

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130530-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-053013	5/30/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-836-SA5A-SB-2.5-3.5	5/30/13 10:30	SO	None	2 - Encore	10 day																			X												
SL-837-SA5A-SB-4.5-5.5MS	5/30/13 09:10	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-1237-SA5A-SB-4.5-5.5	5/30/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-819-SA5A-SB-0.0-0.5	5/30/13 14:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-819-SA5A-SB-0.0-0.5	5/30/13 14:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-819-SA5A-SB-6.5-7.5	5/30/13 14:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-819-SA5A-SB-6.5-7.5	5/30/13 14:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-819-SA5A-SB-6.5-7.5	5/30/13 14:45	SO	None	2 - Encore	10 day																			X												
SL-833-SA5A-SB-0.0-0.5	5/30/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-833-SA5A-SB-0.0-0.5	5/30/13 13:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-833-SA5A-SB-2.5-3.5	5/30/13 13:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-833-SA5A-SB-2.5-3.5	5/30/13 13:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-833-SA5A-SB-2.5-3.5	5/30/13 13:55	SO	None	2 - Encore	10 day																			X												
SL-834-SA5A-SB-0.0-0.5	5/30/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-834-SA5A-SB-0.0-0.5	5/30/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-834-SA5A-SB-2.4-3.4	5/30/13 13:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X											X											
SL-834-SA5A-SB-2.4-3.4	5/30/13 13:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-834-SA5A-SB-2.4-3.4	5/30/13 13:10	SO	None	2 - Encore	10 day																			X												

acct#13013 Cap#13938848 Sample# 7076730-46

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/30/2013
CarrierName: FedEx
AirbillNo: 799885359473

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130530-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Myers	05/30/13	1600									
									Patrick	5/31/13	0920

COC Rev 2

COC: 20130530-03, Page 2 of 2

2 of 2

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C#1393848

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 5/31/13

Time of Receipt: 0920

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	Y	B	
2	↓	0.8	↓	↓	↓	↓	
3	↓	0.7	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 5/31/13 1040

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 13, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/03/2013
Group Number: 1394124
SDG: PH044
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-815-SA5A-SB-0.0-0.5 Soil	7078551
SL-838-SA5A-SB-0.0-0.5 Soil	7078552
SL-838-SA5A-SB-0.0-0.5MS Soil	7078553
SL-838-SA5A-SB-0.0-0.5MSD Soil	7078554
SL-838-SA5A-SB-0.0-0.5DUP Soil	7078555
SL-1238-SA5A-SB-0.0-0.5 Soil	7078556
SL-840-SA5A-SB-0.0-0.5 Soil	7078557
SL-839-SA5A-SB-0.0-0.5 Soil	7078558
SL-841-SA5A-SB-0.0-0.5 Soil	7078559

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.6	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	0.73	J	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.7	0.69	1
12969	Naphthalene	91-20-3	1.5	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.69	1
12969	Pyrene	129-00-0	0.97	J	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	22		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	42		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		40.8	7.86	1
06944	Antimony	7440-36-0	0.631	J	4.08	0.510	1
06935	Arsenic	7440-38-2	4.82		4.08	0.336	1
06946	Barium	7440-39-3	108		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.558	J	1.02	0.0683	1
07914	Boron	7440-42-8	4.02	J	10.2	0.846	1
06949	Cadmium	7440-43-9	0.394	J	1.02	0.0336	1
01650	Calcium	7440-70-2	3,130		20.4	4.10	1
06951	Chromium	7440-47-3	19.9		3.06	0.0897	1
06952	Cobalt	7440-48-4	5.46		1.02	0.0918	1
06953	Copper	7440-50-8	13.1		2.04	0.184	1
01654	Iron	7439-89-6	21,000		40.8	3.87	1
06955	Lead	7439-92-1	10.7		3.06	0.479	1
01656	Lithium	7439-93-2	22.9		4.1	0.56	1

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

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,510		10.2	1.76	1
06958	Manganese	7439-96-5	335		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.621	J	2.04	0.173	1
06961	Nickel	7440-02-0	13.2		2.04	0.112	1
10145	Phosphorus	7723-14-0	683		10.2	0.520	1
01662	Potassium	7440-09-7	4,200		102	13.8	1
01667	Sodium	7440-23-5	74.4	J	102	17.0	1
06969	Tin	7440-31-5	2.64	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,100		1.02	0.173	1
06971	Vanadium	7440-62-2	33.9		1.02	0.112	1
06972	Zinc	7440-66-6	72.4		4.08	0.204	1
10146	Zirconium	7440-67-7	2.85	J	5.10	0.846	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.168	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0528	J	0.204	0.0204	2
06144	Strontium	7440-24-6	25.1		0.408	0.0347	2
06145	Thallium	7440-28-0	0.268		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0158	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.37		0.0100	0.0100	1
	The pH was measured in water at 22.9 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0862	J	1.01	0.0496	1
11031	12378-PeCDD	40321-76-4	0.0978	JBQ	5.06	0.0609	1
11031	123478-HxCDD	39227-28-6	0.253	J	5.06	0.0618	1
11031	123678-HxCDD	57653-85-7	0.633	JBQ	5.06	0.0683	1
11031	123789-HxCDD	19408-74-3	0.577	JB	5.06	0.0685	1
11031	1234678-HpCDD	35822-46-9	14.3	B	5.06	0.0894	1
11031	OCDD	3268-87-9	207	B	10.1	0.0721	1
11031	2378-TCDF	51207-31-9	0.0861	JQ	1.01	0.0766	1
11031	12378-PeCDF	57117-41-6	0.267	JB	5.06	0.0369	1
11031	23478-PeCDF	57117-31-4	0.363	JB	5.06	0.0358	1
11031	123478-HxCDF	70648-26-9	0.179	JB	5.06	0.0491	1
11031	123678-HxCDF	57117-44-9	0.195	JB	5.06	0.0477	1
11031	123789-HxCDF	72918-21-9	0.481	JB	5.06	0.0545	1
11031	234678-HxCDF	60851-34-5	0.204	JBQ	5.06	0.0501	1
11031	1234678-HpCDF	67562-39-4	2.51	JB	5.06	0.0353	1
11031	1234789-HpCDF	55673-89-7	0.315	JBQ	5.06	0.0487	1
11031	OCDF	39001-02-0	11.6	B	10.1	0.0514	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.605				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 20:55	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 02:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/11/2013 19:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:06	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:21	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:21	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:40	David K Beck	2

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

Sample Description: SL-815-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078551
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 08:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL815 SDG#: PH044-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:21	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:21	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.48	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.79	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	7.3		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	18		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		40.3	7.76	1
06944	Antimony	7440-36-0	0.791	J	4.03	0.503	1
06935	Arsenic	7440-38-2	4.41		4.03	0.332	1
06946	Barium	7440-39-3	103		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.616	J	1.01	0.0675	1
07914	Boron	7440-42-8	3.37	J	10.1	0.836	1
06949	Cadmium	7440-43-9	0.321	J	1.01	0.0332	1
01650	Calcium	7440-70-2	1,590		20.1	4.05	1
06951	Chromium	7440-47-3	21.7		3.02	0.0886	1
06952	Cobalt	7440-48-4	6.05		1.01	0.0906	1
06953	Copper	7440-50-8	11.9		2.01	0.181	1
01654	Iron	7439-89-6	20,800		40.3	3.83	1
06955	Lead	7439-92-1	6.56		3.02	0.473	1
01656	Lithium	7439-93-2	19.3		4.0	0.55	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,100		10.1	1.74	1
06958	Manganese	7439-96-5	281		1.01	0.0836	1
06960	Molybdenum	7439-98-7	0.807	J	2.01	0.171	1
06961	Nickel	7440-02-0	12.9		2.01	0.111	1
10145	Phosphorus	7723-14-0	401		10.1	0.513	1
01662	Potassium	7440-09-7	4,040		101	13.6	1
01667	Sodium	7440-23-5	68.6	J	101	16.8	1
06969	Tin	7440-31-5	2.71	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,140		1.01	0.171	1
06971	Vanadium	7440-62-2	35.8		1.01	0.111	1
06972	Zinc	7440-66-6	58.3		4.03	0.201	1
10146	Zirconium	7440-67-7	3.32	J	5.03	0.836	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0398	J	0.201	0.0201	2
06144	Strontium	7440-24-6	18.5		0.403	0.0342	2
06145	Thallium	7440-28-0	0.261		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0123	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.45		0.0100	0.0100	1
	The pH was measured in water at 22.2 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0382	1
11031	12378-PeCDD	40321-76-4	0.0679	JBQ	5.23	0.0478	1
11031	123478-HxCDD	39227-28-6	0.0479	J	5.23	0.0398	1
11031	123678-HxCDD	57653-85-7	0.495	JB	5.23	0.0427	1
11031	123789-HxCDD	19408-74-3	0.670	JBQ	5.23	0.0416	1
11031	1234678-HpCDD	35822-46-9	1.87	JB	5.23	0.0579	1
11031	OCDD	3268-87-9	24.5	B	10.5	0.0397	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0687	1
11031	12378-PeCDF	57117-41-6	0.313	JBQ	5.23	0.0234	1
11031	23478-PeCDF	57117-31-4	0.127	JB	5.23	0.0212	1
11031	123478-HxCDF	70648-26-9	0.0879	JB	5.23	0.0244	1
11031	123678-HxCDF	57117-44-9	0.0766	JB	5.23	0.0228	1
11031	123789-HxCDF	72918-21-9	0.564	JBQ	5.23	0.0301	1
11031	234678-HxCDF	60851-34-5	0.0603	JB	5.23	0.0227	1
11031	1234678-HpCDF	67562-39-4	0.275	JBQ	5.23	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0486	JBQ	5.23	0.0197	1
11031	OCDF	39001-02-0	0.615	JB	10.5	0.0360	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.141				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	94	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 19:15	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 00:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/11/2013 20:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 17:58	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:38	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 12:38	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:09	David K Beck	2

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

Sample Description: SL-838-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078552
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:38	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:23	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078553
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.7	0.70	1
12969	Acenaphthylene	208-96-8	29		1.7	0.35	1
12969	Anthracene	120-12-7	27		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	32		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	34		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	27		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	32		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	29		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	32		19	6.3	1
12969	Chrysene	218-01-9	33		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	30		1.7	0.70	1
12969	Diethylphthalate	84-66-2	33		19	6.3	1
12969	Dimethylphthalate	131-11-3	34		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	31		19	6.3	1
12969	Fluoranthene	206-44-0	32		1.7	0.70	1
12969	Fluorene	86-73-7	32		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	29		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	30		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	30		1.7	0.70	1
12969	Naphthalene	91-20-3	32		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	28		19	6.3	1
12969	Phenanthrene	85-01-8	35		1.7	0.70	1
12969	Pyrene	129-00-0	27		1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.7		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	26		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	34		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,100		40.3	7.76	1
06944	Antimony	7440-36-0	30.8		4.03	0.503	1
06935	Arsenic	7440-38-2	19.2		4.03	0.332	1
06946	Barium	7440-39-3	300		1.01	0.0332	1
06947	Beryllium	7440-41-7	5.84		1.01	0.0675	1
07914	Boron	7440-42-8	202		10.1	0.836	1
06949	Cadmium	7440-43-9	5.12		1.01	0.0332	1
01650	Calcium	7440-70-2	2,450		20.1	4.05	1
06951	Chromium	7440-47-3	45.7		3.02	0.0886	1
06952	Cobalt	7440-48-4	54.5		1.01	0.0906	1
06953	Copper	7440-50-8	38.2		2.01	0.181	1
01654	Iron	7439-89-6	21,200		40.3	3.83	1
06955	Lead	7439-92-1	20.7		3.02	0.473	1
01656	Lithium	7439-93-2	122		4.0	0.55	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078553
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,450	10.1	1.74	1
06958	Manganese	7439-96-5	347	1.01	0.0836	1
06960	Molybdenum	7439-98-7	197	2.01	0.171	1
06961	Nickel	7440-02-0	62.4	2.01	0.111	1
10145	Phosphorus	7723-14-0	480	10.1	0.513	1
01662	Potassium	7440-09-7	5,330	101	13.6	1
01667	Sodium	7440-23-5	1,070	101	16.8	1
06969	Tin	7440-31-5	372	10.1	0.222	1
06970	Titanium	7440-32-6	1,550	1.01	0.171	1
06971	Vanadium	7440-62-2	92.1	1.01	0.111	1
06972	Zinc	7440-66-6	107	4.03	0.201	1
10146	Zirconium	7440-67-7	92.1	5.03	0.836	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.04	0.403	0.101	2
06142	Silver	7440-22-4	10.4	0.201	0.0201	2
06144	Strontium	7440-24-6	30.4	0.403	0.0342	2
06145	Thallium	7440-28-0	0.713	0.201	0.0302	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.179	0.0170	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.5	0.10	0.10	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078553
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.9		1.02	0.0616	1
11031	12378-PeCDD	40321-76-4	107	B	5.12	0.0779	1
11031	123478-HxCDD	39227-28-6	97.8		5.12	0.0751	1
11031	123678-HxCDD	57653-85-7	102	B	5.12	0.0804	1
11031	123789-HxCDD	19408-74-3	100	B	5.12	0.0783	1
11031	1234678-HpCDD	35822-46-9	105	B	5.12	0.0940	1
11031	OCDD	3268-87-9	319	B	10.2	0.0716	1
11031	2378-TCDF	51207-31-9	22.0		1.02	0.117	1
11031	12378-PeCDF	57117-41-6	99.9	B	5.12	0.0525	1
11031	23478-PeCDF	57117-31-4	100	B	5.12	0.0508	1
11031	123478-HxCDF	70648-26-9	94.2	B	5.12	0.108	1
11031	123678-HxCDF	57117-44-9	93.5	B	5.12	0.105	1
11031	123789-HxCDF	72918-21-9	92.4	B	5.12	0.122	1
11031	234678-HxCDF	60851-34-5	94.9	B	5.12	0.106	1
11031	1234678-HpCDF	67562-39-4	93.0	B	5.12	0.0648	1
11031	1234789-HpCDF	55673-89-7	92.0	B	5.12	0.0965	1
11031	OCDF	39001-02-0	189	B	10.2	0.0591	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	101	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	112	24 - 185
13C12-23478-PeCDF	108	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078553
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MS

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 19:48	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 00:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/11/2013 21:53	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:09	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:45	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/09/2013 20:15	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:15	David K Beck	2

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078553
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:45	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:29	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078554
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	32		1.7	0.70	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	29		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	35		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	33		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	32		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	28		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	29		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	29		19	6.3	1
12969	Chrysene	218-01-9	34		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.7	0.70	1
12969	Diethylphthalate	84-66-2	36		19	6.3	1
12969	Dimethylphthalate	131-11-3	36		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	33		19	6.3	1
12969	Fluoranthene	206-44-0	34		1.7	0.70	1
12969	Fluorene	86-73-7	34		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	31		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	31		1.7	0.70	1
12969	Naphthalene	91-20-3	34		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	30		19	6.3	1
12969	Phenanthrene	85-01-8	35		1.7	0.70	1
12969	Pyrene	129-00-0	28		1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	14		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	23		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		40.3	7.76	1
06944	Antimony	7440-36-0	30.7		4.03	0.503	1
06935	Arsenic	7440-38-2	18.9		4.03	0.332	1
06946	Barium	7440-39-3	294		1.01	0.0332	1
06947	Beryllium	7440-41-7	5.66		1.01	0.0675	1
07914	Boron	7440-42-8	196		10.1	0.836	1
06949	Cadmium	7440-43-9	4.99		1.01	0.0332	1
01650	Calcium	7440-70-2	2,330		20.1	4.05	1
06951	Chromium	7440-47-3	42.7		3.02	0.0886	1
06952	Cobalt	7440-48-4	52.6		1.01	0.0906	1
06953	Copper	7440-50-8	37.2		2.01	0.181	1
01654	Iron	7439-89-6	20,100		40.3	3.83	1
06955	Lead	7439-92-1	20.4		3.02	0.473	1
01656	Lithium	7439-93-2	119		4.0	0.55	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078554
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,240	10.1	1.74	1
06958	Manganese	7439-96-5	310	1.01	0.0836	1
06960	Molybdenum	7439-98-7	190	2.01	0.171	1
06961	Nickel	7440-02-0	60.5	2.01	0.111	1
10145	Phosphorus	7723-14-0	462	10.1	0.513	1
01662	Potassium	7440-09-7	5,140	101	13.6	1
01667	Sodium	7440-23-5	1,050	101	16.8	1
06969	Tin	7440-31-5	360	10.1	0.222	1
06970	Titanium	7440-32-6	1,500	1.01	0.171	1
06971	Vanadium	7440-62-2	89.4	1.01	0.111	1
06972	Zinc	7440-66-6	104	4.03	0.201	1
10146	Zirconium	7440-67-7	90.4	5.03	0.836	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.23	0.403	0.101	2
06142	Silver	7440-22-4	10.4	0.201	0.0201	2
06144	Strontium	7440-24-6	29.0	0.403	0.0342	2
06145	Thallium	7440-28-0	0.697	0.201	0.0302	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.177	0.0169	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	4.5	0.10	0.10	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078554
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.4		1.05	0.0544	1
11031	12378-PeCDD	40321-76-4	104	B	5.24	0.0645	1
11031	123478-HxCDD	39227-28-6	100		5.24	0.0744	1
11031	123678-HxCDD	57653-85-7	102	B	5.24	0.0827	1
11031	123789-HxCDD	19408-74-3	100	B	5.24	0.0791	1
11031	1234678-HpCDD	35822-46-9	101	B	5.24	0.0943	1
11031	OCDD	3268-87-9	222	B	10.5	0.0560	1
11031	2378-TCDF	51207-31-9	22.1		1.05	0.0867	1
11031	12378-PeCDF	57117-41-6	102	B	5.24	0.0461	1
11031	23478-PeCDF	57117-31-4	99.7	B	5.24	0.0464	1
11031	123478-HxCDF	70648-26-9	94.1	B	5.24	0.0724	1
11031	123678-HxCDF	57117-44-9	96.4	B	5.24	0.0723	1
11031	123789-HxCDF	72918-21-9	93.8	B	5.24	0.0852	1
11031	234678-HxCDF	60851-34-5	96.2	B	5.24	0.0753	1
11031	1234678-HpCDF	67562-39-4	94.1	B	5.24	0.0507	1
11031	1234789-HpCDF	55673-89-7	96.5	B	5.24	0.0828	1
11031	OCDF	39001-02-0	185	B	10.5	0.0630	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	99	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	106	24 - 185
13C12-23478-PeCDF	100	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078554
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MSD

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 20:21	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 01:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/11/2013 22:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:13	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:48	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/09/2013 20:16	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:16	David K Beck	2

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

Sample Description: SL-838-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078554
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:48	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:31	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078555
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		40.3	7.76	1
06944	Antimony	7440-36-0	0.730	J	4.03	0.503	1
06935	Arsenic	7440-38-2	4.59		4.03	0.332	1
06946	Barium	7440-39-3	101		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.597	J	1.01	0.0675	1
07914	Boron	7440-42-8	3.05	J	10.1	0.836	1
06949	Cadmium	7440-43-9	0.287	J	1.01	0.0332	1
01650	Calcium	7440-70-2	1,500		20.1	4.05	1
06951	Chromium	7440-47-3	22.0		3.02	0.0886	1
06952	Cobalt	7440-48-4	5.74		1.01	0.0906	1
06953	Copper	7440-50-8	11.3		2.01	0.181	1
01654	Iron	7439-89-6	20,700		40.3	3.83	1
06955	Lead	7439-92-1	6.07		3.02	0.473	1
01656	Lithium	7439-93-2	18.3		4.0	0.55	1
01657	Magnesium	7439-95-4	4,030		10.1	1.74	1
06958	Manganese	7439-96-5	275		1.01	0.0836	1
06960	Molybdenum	7439-98-7	0.896	J	2.01	0.171	1
06961	Nickel	7440-02-0	12.9		2.01	0.111	1
10145	Phosphorus	7723-14-0	392		10.1	0.513	1
01662	Potassium	7440-09-7	4,010		101	13.6	1
01667	Sodium	7440-23-5	66.8	J	101	16.8	1
06969	Tin	7440-31-5	2.84	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,080		1.01	0.171	1
06971	Vanadium	7440-62-2	34.8		1.01	0.111	1
06972	Zinc	7440-66-6	57.0		4.03	0.201	1
10146	Zirconium	7440-67-7	3.16	J	5.03	0.836	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.102	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0253	J	0.201	0.0201	2
06144	Strontium	7440-24-6	17.5		0.403	0.0342	2
06145	Thallium	7440-28-0	0.298		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0113	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.47		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
	The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-838-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078555
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02DUP

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 18:05	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 12:43	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 12:43	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:13	David K Beck	2
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 12:43	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:27	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-838-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078555
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:35

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL838 SDG#: PH044-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	0.96	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	0.70	J	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	21		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		40.9	7.88	1
06944	Antimony	7440-36-0	0.948	J	4.09	0.511	1
06935	Arsenic	7440-38-2	4.38		4.09	0.337	1
06946	Barium	7440-39-3	106		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.627	J	1.02	0.0685	1
07914	Boron	7440-42-8	3.26	J	10.2	0.849	1
06949	Cadmium	7440-43-9	0.364	J	1.02	0.0337	1
01650	Calcium	7440-70-2	1,550		20.4	4.11	1
06951	Chromium	7440-47-3	21.8		3.07	0.0900	1
06952	Cobalt	7440-48-4	6.49		1.02	0.0920	1
06953	Copper	7440-50-8	12.4		2.04	0.184	1
01654	Iron	7439-89-6	21,100		40.9	3.88	1
06955	Lead	7439-92-1	9.58		3.07	0.480	1
01656	Lithium	7439-93-2	19.5		4.1	0.56	1

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,070		10.2	1.77	1
06958	Manganese	7439-96-5	372		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.765	J	2.04	0.174	1
06961	Nickel	7440-02-0	13.5		2.04	0.112	1
10145	Phosphorus	7723-14-0	423		10.2	0.521	1
01662	Potassium	7440-09-7	4,040		102	13.8	1
01667	Sodium	7440-23-5	65.5	J	102	17.1	1
06969	Tin	7440-31-5	2.82	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,150		1.02	0.174	1
06971	Vanadium	7440-62-2	36.4		1.02	0.112	1
06972	Zinc	7440-66-6	60.1		4.09	0.204	1
10146	Zirconium	7440-67-7	3.72	J	5.11	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.103	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0416	J	0.204	0.0204	2
06144	Strontium	7440-24-6	19.6		0.409	0.0348	2
06145	Thallium	7440-28-0	0.268		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0150	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.24		0.0100	0.0100	1
	The pH was measured in water at 22.6 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0350	1
11031	12378-PeCDD	40321-76-4	0.0997	JBQ	5.20	0.0446	1
11031	123478-HxCDD	39227-28-6	0.0997	J	5.20	0.0468	1
11031	123678-HxCDD	57653-85-7	0.675	JBQ	5.20	0.0504	1
11031	123789-HxCDD	19408-74-3	0.762	JB	5.20	0.0523	1
11031	1234678-HpCDD	35822-46-9	4.03	JB	5.20	0.0509	1
11031	OCDD	3268-87-9	49.0	B	10.4	0.0439	1
11031	2378-TCDF	51207-31-9	0.292	JQ	1.04	0.0797	1
11031	12378-PeCDF	57117-41-6	0.529	JB	5.20	0.0313	1
11031	23478-PeCDF	57117-31-4	0.451	JB	5.20	0.0300	1
11031	123478-HxCDF	70648-26-9	0.155	JB	5.20	0.0376	1
11031	123678-HxCDF	57117-44-9	0.204	JBQ	5.20	0.0340	1
11031	123789-HxCDF	72918-21-9	0.594	JB	5.20	0.0454	1
11031	234678-HxCDF	60851-34-5	0.194	JBQ	5.20	0.0344	1
11031	1234678-HpCDF	67562-39-4	0.622	JB	5.20	0.0172	1
11031	1234789-HpCDF	55673-89-7	0.0826	JB	5.20	0.0265	1
11031	OCDF	39001-02-0	1.15	JB	10.4	0.0391	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.375				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	114	25 - 181
13C12-123478-HxCDD	94	32 - 141
13C12-123678-HxCDD	98	28 - 130
13C12-123789-HxCDD	93	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	93	24 - 169
13C12-12378-PeCDF	125	24 - 185
13C12-23478-PeCDF	118	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	96	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	105	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 21:28	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 01:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/11/2013 23:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:10	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:23	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:23	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:42	David K Beck	2

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

Sample Description: SL-1238-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078556
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 09:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1238 SDG#: PH044-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:23	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:33	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	0.39	J	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	2.1		1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	2.4		1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	5.7		1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	J	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9		1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	5.7		1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	20	6.8	1
12969	Fluoranthene	206-44-0	5.1		1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.1	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.8	J	1.9	0.75	1
12969	Naphthalene	91-20-3	2.4		1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	2.7		1.9	0.75	1
12969	Pyrene	129-00-0	4.1		1.9	0.75	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	6.3		5.7	2.3	1
12952	EFH (C21-C30)	n.a.	30		5.7	2.3	1
12952	EFH (C30-C40)	n.a.	44		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,100		44.8	8.64	1
06944	Antimony	7440-36-0	0.604	J	4.48	0.560	1
06935	Arsenic	7440-38-2	4.97		4.48	0.370	1
06946	Barium	7440-39-3	123		1.12	0.0370	1
06947	Beryllium	7440-41-7	0.729	J	1.12	0.0750	1
07914	Boron	7440-42-8	3.50	J	11.2	0.930	1
06949	Cadmium	7440-43-9	0.407	J	1.12	0.0370	1
01650	Calcium	7440-70-2	3,210		22.4	4.50	1
06951	Chromium	7440-47-3	24.9		3.36	0.0986	1
06952	Cobalt	7440-48-4	7.37		1.12	0.101	1
06953	Copper	7440-50-8	13.5		2.24	0.202	1
01654	Iron	7439-89-6	26,000		44.8	4.26	1
06955	Lead	7439-92-1	12.3		3.36	0.526	1
01656	Lithium	7439-93-2	26.9		4.5	0.62	1

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	5,340		11.2	1.94	1
06958	Manganese	7439-96-5	410		1.12	0.0930	1
06960	Molybdenum	7439-98-7	0.752	J	2.24	0.190	1
06961	Nickel	7440-02-0	16.4		2.24	0.123	1
10145	Phosphorus	7723-14-0	597		11.2	0.571	1
01662	Potassium	7440-09-7	4,960		112	15.1	1
01667	Sodium	7440-23-5	91.8	J	112	18.7	1
06969	Tin	7440-31-5	3.11	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,450		1.12	0.190	1
06971	Vanadium	7440-62-2	46.9		1.12	0.123	1
06972	Zinc	7440-66-6	76.4		4.48	0.224	1
10146	Zirconium	7440-67-7	4.42	J	5.60	0.930	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.136	J	0.448	0.112	2
06142	Silver	7440-22-4	0.254		0.224	0.0224	2
06144	Strontium	7440-24-6	25.3		0.448	0.0381	2
06145	Thallium	7440-28-0	0.387		0.224	0.0336	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0206		0.0186	0.0112	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.68		0.0100	0.0100	1
	The pH was measured in water at 22.7 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0488	JQ	1.13	0.0428	1
11031	12378-PeCDD	40321-76-4	0.700	JB	5.63	0.0663	1
11031	123478-HxCDD	39227-28-6	1.40	J	5.63	0.0832	1
11031	123678-HxCDD	57653-85-7	3.55	JB	5.63	0.0903	1
11031	123789-HxCDD	19408-74-3	3.17	JB	5.63	0.0851	1
11031	1234678-HpCDD	35822-46-9	135	B	5.63	0.203	1
11031	OCDD	3268-87-9	2,100	B	11.3	0.121	1
11031	2378-TCDF	51207-31-9	0.186	JQ	1.13	0.0951	1
11031	12378-PeCDF	57117-41-6	0.639	JB	5.63	0.0462	1
11031	23478-PeCDF	57117-31-4	0.837	JB	5.63	0.0429	1
11031	123478-HxCDF	70648-26-9	0.937	JB	5.63	0.0809	1
11031	123678-HxCDF	57117-44-9	0.929	JB	5.63	0.0756	1
11031	123789-HxCDF	72918-21-9	0.540	JB	5.63	0.0944	1
11031	234678-HxCDF	60851-34-5	1.33	JB	5.63	0.0823	1
11031	1234678-HpCDF	67562-39-4	27.2	B	5.63	0.0599	1
11031	1234789-HpCDF	55673-89-7	3.23	JB	5.63	0.0889	1
11031	OCDF	39001-02-0	131	B	11.3	0.0598	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	4.48				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	99	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	84	24 - 169
13C12-12378-PeCDF	104	24 - 185
13C12-23478-PeCDF	101	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 22:02	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 03:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/12/2013 03:40	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:21	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:30	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/09/2013 20:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:47	David K Beck	2

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

Sample Description: SL-840-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078557
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 10:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL840 SDG#: PH044-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:30	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:35	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.2	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.3	J	1.8	0.71	1
12969	Naphthalene	91-20-3	1.6	J	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	12		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	19		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		42.3	8.16	1
06944	Antimony	7440-36-0	0.706	J	4.23	0.529	1
06935	Arsenic	7440-38-2	4.61		4.23	0.349	1
06946	Barium	7440-39-3	111		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.642	J	1.06	0.0709	1
07914	Boron	7440-42-8	2.72	J	10.6	0.878	1
06949	Cadmium	7440-43-9	0.343	J	1.06	0.0349	1
01650	Calcium	7440-70-2	2,170		21.2	4.25	1
06951	Chromium	7440-47-3	20.8		3.17	0.0931	1
06952	Cobalt	7440-48-4	6.40		1.06	0.0952	1
06953	Copper	7440-50-8	11.1		2.12	0.190	1
01654	Iron	7439-89-6	21,100		42.3	4.02	1
06955	Lead	7439-92-1	11.6		3.17	0.497	1
01656	Lithium	7439-93-2	18.8		4.2	0.58	1

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,940		10.6	1.83	1
06958	Manganese	7439-96-5	390		1.06	0.0878	1
06960	Molybdenum	7439-98-7	0.679	J	2.12	0.180	1
06961	Nickel	7440-02-0	13.4		2.12	0.116	1
10145	Phosphorus	7723-14-0	437		10.6	0.539	1
01662	Potassium	7440-09-7	3,820		106	14.3	1
01667	Sodium	7440-23-5	64.7	J	106	17.7	1
06969	Tin	7440-31-5	2.75	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,080		1.06	0.180	1
06971	Vanadium	7440-62-2	36.9		1.06	0.116	1
06972	Zinc	7440-66-6	55.9		4.23	0.212	1
10146	Zirconium	7440-67-7	3.41	J	5.29	0.878	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.423	0.106	2
06142	Silver	7440-22-4	0.0450	J	0.212	0.0212	2
06144	Strontium	7440-24-6	22.1		0.423	0.0360	2
06145	Thallium	7440-28-0	0.256		0.212	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.25		0.0100	0.0100	1
	The pH was measured in water at 22.4 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0545	JQ	1.07	0.0391	1
11031	12378-PeCDD	40321-76-4	0.140	JB	5.34	0.0454	1
11031	123478-HxCDD	39227-28-6	0.188	J	5.34	0.0505	1
11031	123678-HxCDD	57653-85-7	0.596	JBQ	5.34	0.0561	1
11031	123789-HxCDD	19408-74-3	0.588	JBQ	5.34	0.0550	1
11031	1234678-HpCDD	35822-46-9	16.2	B	5.34	0.0846	1
11031	OCDD	3268-87-9	249	B	10.7	0.0600	1
11031	2378-TCDF	51207-31-9	0.237	J	1.07	0.0741	1
11031	12378-PeCDF	57117-41-6	0.317	JB	5.34	0.0316	1
11031	23478-PeCDF	57117-31-4	0.395	JB	5.34	0.0320	1
11031	123478-HxCDF	70648-26-9	0.180	JB	5.34	0.0484	1
11031	123678-HxCDF	57117-44-9	0.219	JBQ	5.34	0.0457	1
11031	123789-HxCDF	72918-21-9	0.248	JBQ	5.34	0.0579	1
11031	234678-HxCDF	60851-34-5	0.230	JB	5.34	0.0466	1
11031	1234678-HpCDF	67562-39-4	4.07	JB	5.34	0.0292	1
11031	1234789-HpCDF	55673-89-7	0.411	JBQ	5.34	0.0441	1
11031	OCDF	39001-02-0	19.7	B	10.7	0.0460	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.634				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	102	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 22:35	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 02:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/12/2013 04:37	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:25	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:33	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:33	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:49	David K Beck	2

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

Sample Description: SL-839-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078558
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:15

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL839 SDG#: PH044-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:33	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:42	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	0.77	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		40.6	7.82	1
06944	Antimony	7440-36-0	0.681	J	4.06	0.507	1
06935	Arsenic	7440-38-2	6.22		4.06	0.335	1
06946	Barium	7440-39-3	117		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.993	J	1.01	0.0680	1
07914	Boron	7440-42-8	1.92	J	10.1	0.842	1
06949	Cadmium	7440-43-9	0.135	J	1.01	0.0335	1
01650	Calcium	7440-70-2	2,470		20.3	4.08	1
06951	Chromium	7440-47-3	25.4		3.04	0.0893	1
06952	Cobalt	7440-48-4	6.70		1.01	0.0913	1
06953	Copper	7440-50-8	9.31		2.03	0.183	1
01654	Iron	7439-89-6	25,100		40.6	3.86	1
06955	Lead	7439-92-1	7.83		3.04	0.477	1
01656	Lithium	7439-93-2	23.4		4.1	0.56	1

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,440		10.1	1.76	1
06958	Manganese	7439-96-5	240		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.709	J	2.03	0.172	1
06961	Nickel	7440-02-0	12.7		2.03	0.112	1
10145	Phosphorus	7723-14-0	218		10.1	0.517	1
01662	Potassium	7440-09-7	2,000		101	13.7	1
01667	Sodium	7440-23-5	86.1	J	101	16.9	1
06969	Tin	7440-31-5	3.07	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,090		1.01	0.172	1
06971	Vanadium	7440-62-2	47.5		1.01	0.112	1
06972	Zinc	7440-66-6	45.2		4.06	0.203	1
10146	Zirconium	7440-67-7	3.66	J	5.07	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.184	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0548	J	0.203	0.0203	2
06144	Strontium	7440-24-6	26.6		0.406	0.0345	2
06145	Thallium	7440-28-0	0.221		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.61		0.0100	0.0100	1
	The pH was measured in water at 22.5 C. The holding time was not met. The sample was submitted to the laboratory outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0736 J	1.04	0.0415	1
11031	12378-PeCDD	40321-76-4	0.0727 JBQ	5.22	0.0382	1
11031	123478-HxCDD	39227-28-6	0.0576 JQ	5.22	0.0367	1
11031	123678-HxCDD	57653-85-7	0.124 JBQ	5.22	0.0401	1
11031	123789-HxCDD	19408-74-3	0.0595 JBQ	5.22	0.0391	1
11031	1234678-HpCDD	35822-46-9	0.260 JBQ	5.22	0.0412	1
11031	OCDD	3268-87-9	2.29 JB	10.4	0.0414	1
11031	2378-TCDF	51207-31-9	0.0406 JQ	1.04	0.0384	1
11031	12378-PeCDF	57117-41-6	0.152 JBQ	5.22	0.0223	1
11031	23478-PeCDF	57117-31-4	5.22 U	5.22	0.0209	1
11031	123478-HxCDF	70648-26-9	0.104 JB	5.22	0.0211	1
11031	123678-HxCDF	57117-44-9	0.0674 JBQ	5.22	0.0201	1
11031	123789-HxCDF	72918-21-9	0.0781 JBQ	5.22	0.0257	1
11031	234678-HxCDF	60851-34-5	0.0890 JBQ	5.22	0.0233	1
11031	1234678-HpCDF	67562-39-4	0.0783 JB	5.22	0.0164	1
11031	1234789-HpCDF	55673-89-7	5.22 U	5.22	0.0294	1
11031	OCDF	39001-02-0	0.249 JB	10.4	0.0453	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0856			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	100	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the temperature blank bottle(s) upon receipt at the lab was 6.8 C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 9.7-10.2 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13157SLB026	06/10/2013 23:09	Chad A Moline	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13157SLB026	06/06/2013 18:00	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131570007A	06/08/2013 01:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131570007A	06/06/2013 16:30	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13161007	06/12/2013 05:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13161007	06/10/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06944	Antimony	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06946	Barium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
07914	Boron	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01650	Calcium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06951	Chromium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06953	Copper	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01654	Iron	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06955	Lead	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01656	Lithium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06958	Manganese	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06961	Nickel	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01662	Potassium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
01667	Sodium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06969	Tin	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06970	Titanium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06972	Zinc	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131540637002	06/04/2013 19:28	John P Hook	1
06141	Selenium	SW-846 6020A	1	131540637002B	06/04/2013 13:35	David K Beck	2
06142	Silver	SW-846 6020A	1	131540637002A	06/04/2013 13:35	David K Beck	2
06144	Strontium	SW-846 6020A	1	131540637002A	06/09/2013 20:51	David K Beck	2

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

Sample Description: SL-841-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7078559
LLI Group # 1394124
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 05/31/2013 13:45

Submitted: 06/03/2013 08:50
Reported: 06/13/2013 12:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL841 SDG#: PH044-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131540637002A	06/04/2013 13:35	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:44	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131540637002	06/03/2013 23:23	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13154039402A	06/03/2013 21:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13155162402A	06/04/2013 18:40	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13157SLB026	Sample number(s): 7078551-7078554,7078556-7078559									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	95		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	98		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	107		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	106		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	98		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	96		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	104		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	108		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	104		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	104		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	88		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	86		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	94		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	110		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	99		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		71-120		
Batch number: 131570007A	Sample number(s): 7078551-7078554,7078556-7078559									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	101		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	96		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	102		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	74		49-107		
Batch number: 131540637002	Sample number(s): 7078551-7078559									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	109		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Calcium	6.04	J	20.0	4.02	mg/kg	103		80-120		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chromium	0.279	J	3.00	0.0880	mg/kg	109		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	105		80-120		
Iron	4.01	J	40.0	3.80	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	105		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	0.215	J	2.00	0.170	mg/kg	106		80-120		
Nickel	0.323	J	2.00	0.110	mg/kg	108		80-120		
Phosphorus	1.44	J	10.0	0.510	mg/kg	105		80-120		
Potassium	100 U		100.	13.5	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	103		80-120		
Tin	1.46	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	107		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	106		80-120		
Batch number: 131540637002A	Sample number(s): 7078551-7078559									
Silver	0.200	U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0361	J	0.400	0.0340	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	91		80-120		
Batch number: 131540637002B	Sample number(s): 7078551-7078559									
Selenium	0.400	U	0.400	0.100	mg/kg	98		80-120		
Batch number: 131600638001	Sample number(s): 7078551-7078559									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	100		85-120		
Batch number: 13154039402A	Sample number(s): 7078551-7078552,7078555-7078559									
15a pH by 9045D						100		95-105		
Batch number: 13155162402A	Sample number(s): 7078551-7078559									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13161007	Sample number(s): 7078551-7078554,7078556-7078559									
2378-TCDD	1.00	U	1.00	0.0354	ng/kg	103		67-158		
12378-PeCDD	0.0895	J	5.00	0.0390	ng/kg	104		70-142		
123478-HxCDD	5.00	U	5.00	0.0207	ng/kg	95		70-164		
123678-HxCDD	0.0393	J	5.00	0.0216	ng/kg	99		76-134		
123789-HxCDD	0.0384	J	5.00	0.0223	ng/kg	98		64-162		
1234678-HpCDD	0.109	J	5.00	0.0275	ng/kg	96		70-140		
OCDD	0.225	J	10.0	0.0393	ng/kg	91		78-144		
2378-TCDF	1.00	U	1.00	0.0345	ng/kg	108		75-158		
12378-PeCDF	0.0769	J	5.00	0.0180	ng/kg	97		80-134		
23478-PeCDF	0.0332	J	5.00	0.0166	ng/kg	99		68-160		
123478-HxCDF	0.0410	J	5.00	0.0129	ng/kg	89		72-134		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123678-HxCDF	0.0219 J	5.00	0.0126	ng/kg	91		84-130		
123789-HxCDF	0.0272 J	5.00	0.0152	ng/kg	91		78-130		
234678-HxCDF	0.0370 J	5.00	0.0128	ng/kg	92		70-156		
1234678-HpCDF	0.0530 J	5.00	0.00969	ng/kg	90		82-122		
1234789-HpCDF	0.0357 J	5.00	0.0155	ng/kg	94		78-138		
OCDF	0.145 J	10.0	0.0406	ng/kg	90		63-170		
TEQ WHO 2005 - EDLx0.0	0.00737			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13157SLB026	Sample number(s): 7078551-7078554,7078556-7078559 UNSPK: 7078552								
Acenaphthene	86	91	48-127	6	30				
Acenaphthylene	84	91	49-121	8	30				
Anthracene	76	83	52-126	8	30				
Benzo(a)anthracene	97	100	32-135	3	30				
Benzo(a)pyrene	92	93	36-138	2	30				
Benzo(b)fluoranthene	98	106	26-142	7	30				
Benzo(e)pyrene	90	93	70-130	3	30				
Benzo(g,h,i)perylene	77	79	33-141	3	30				
Benzo(k)fluoranthene	93	94	47-129	2	30				
Butylbenzylphthalate	84	84	59-153	1	30				
Di-n-butylphthalate	91	83	62-154	9	30				
Chrysene	93	97	29-148	5	30				
Dibenz(a,h)anthracene	86	90	34-125	5	30				
Diethylphthalate	94	102	76-127	8	30				
Dimethylphthalate	98	103	62-136	4	30				
Bis(2-Ethylhexyl)phthalate	90	94	39-167	5	30				
Fluoranthene	93	97	47-135	5	30				
Fluorene	91	98	50-129	7	30				
Indeno(1,2,3-cd)pyrene	83	85	17-136	3	30				
1-Methylnaphthalene	87	90	50-131	3	30				
2-Methylnaphthalene	84	86	28-144	2	30				
Naphthalene	90	93	31-148	3	30				
N-Nitrosodimethylamine	88	94	48-113	6	30				
Di-n-octylphthalate	80	86	52-162	8	30				
Phenanthrene	101	101	29-142	1	30				
Pyrene	77	80	26-143	4	30				
Batch number: 131570007A	Sample number(s): 7078551-7078554,7078556-7078559 UNSPK: 7078552								
EFH (C12-C14)	115	76	49-123	40*	20				
EFH (C15-C20)	218*	125*	49-123	54*	20				
EFH (C21-C30)	437*	142*	49-123	65*	20				
EFH (C30-C40)	293*	83	49-123	39*	20				
EFH (C8-C11)	88	64	49-123	32*	20				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131540637002	Sample number(s): 7078551-7078559 UNSPK: 7078552 BKG: 7078552								
Aluminum	1903 (2)	1658 (2)	75-125	3	20	14,600	13,900	5	20
Antimony	60*	59*	75-125	0	20	0.756 J	0.697 J	8 (1)	20
Arsenic	98	96	75-125	1	20	4.21	4.38	4 (1)	20
Barium	98	95	75-125	2	20	98.4	96.2	2	20
Beryllium	104	100	75-125	3	20	0.588 J	0.570 J	3 (1)	20
Boron	98	96	75-125	3	20	3.22 J	2.91 J	10 (1)	20
Cadmium	95	93	75-125	3	20	0.307 J	0.274 J	11 (1)	20
Calcium	213*	183*	75-125	5	20	1,520	1,430	6	20
Chromium	119	104	75-125	7	20	20.7	21.0	1	20
Cobalt	96	92	75-125	4	20	5.78	5.49	5	20
Copper	105	100	75-125	3	20	11.4	10.8	5	20
Iron	399 (2)	-653 (2)	75-125	5	20	19,900	19,700	1	20
Lead	94	92	75-125	2	20	6.26	5.80	8 (1)	20
Lithium	102	99	75-125	2	20	18.5	17.5	5 (1)	20
Magnesium	171 (2)	69 (2)	75-125	5	20	3,920	3,850	2	20
Manganese	132 (2)	57 (2)	75-125	11	20	268	262	2	20
Molybdenum	97	94	75-125	4	20	0.771 J	0.856 J	10 (1)	20
Nickel	98	94	75-125	3	20	12.3	12.3	0	20
Phosphorus	78	60*	75-125	4	20	383	374	2	20
Potassium	128 (2)	109 (2)	75-125	4	20	3,860	3,820	1	20
Sodium	100	97	75-125	2	20	65.5 J	63.8 J	3 (1)	20
Tin	92	89	75-125	3	20	2.59 J	2.71 J	5 (1)	20
Titanium	412 (2)	364 (2)	75-125	3	20	1,080	1,040	5	20
Vanadium	112	106	75-125	3	20	34.2	33.2	3	20
Zinc	97	92	75-125	3	20	55.7	54.4	2	20
Zirconium	88	87	75-125	2	20	3.18 J	3.01 J	5 (1)	20
Batch number: 131540637002A	Sample number(s): 7078551-7078559 UNSPK: 7078552 BKG: 7078552								
Silver	103	103	75-125	0	20	0.0380 J	0.0241 J	45* (1)	20
Strontium	148*	129*	75-125	5	20	17.7	16.7	6	20
Thallium	112	108	75-125	2	20	0.249	0.284	13 (1)	20
Batch number: 131540637002B	Sample number(s): 7078551-7078559 UNSPK: 7078552 BKG: 7078552								
Selenium	94	103	75-125	9	20	0.143 J	0.0974 J	38* (1)	20
Batch number: 131600638001	Sample number(s): 7078551-7078559 UNSPK: 7078552 BKG: 7078552								
3a Mercury 7471A	98	97	65-135	1	20	0.0117 J	0.0108 J	8 (1)	20
Batch number: 13154039402A	Sample number(s): 7078551-7078552,7078555-7078559 BKG: 7078552								
15a pH by 9045D						5.45	5.47	0	3
Batch number: 13155162402A	Sample number(s): 7078551-7078559 BKG: 7078552								
14a Moisture Content by 160.3						4.5	4.3	4	20
14a Moisture Content by 160.3						4.5	4.3	4	20
14a Moisture Content by 160.3						4.5	4.3	4	20
Batch number: 13161007	Sample number(s): 7078551-7078554,7078556-7078559 UNSPK: 7078552								
2378-TCDD	102	107	40-135	7	20				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
12378-PeCDD	105	99	40-135	3	20				
123478-HxCDD	95	96	40-135	3	20				
123678-HxCDD	99	97	40-135	0	20				
123789-HxCDD	97	95	40-135	0	20				
1234678-HpCDD	101	95	40-135	4	20				
OCDD	144*	94	40-135	36*	20				
2378-TCDF	107	106	40-135	1	20				
12378-PeCDF	97	97	40-135	2	20				
23478-PeCDF	98	95	40-135	1	20				
123478-HxCDF	92	90	40-135	0	20				
123678-HxCDF	91	92	40-135	3	20				
123789-HxCDF	90	89	40-135	1	20				
234678-HxCDF	93	92	40-135	1	20				
1234678-HpCDF	90	90	40-135	1	20				
1234789-HpCDF	90	92	40-135	5	20				
OCDF	92	88	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13157SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7078551	82	82	92
7078552	84	85	89
7078553	78	85	90
7078554	91	88	95
7078556	86	84	92
7078557	84	86	90
7078558	82	88	92
7078559	86	92	92
Blank	88	95	97
LCS	89	95	94
MS	78	85	90
MSD	91	88	95
Limits:	54-129	61-134	55-129

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131570007A

	Chlorobenzene	Orthoterphenyl
7078551	88	77
7078552	91	88
7078553	102	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Surrogate Quality Control

7078554	90	82
7078556	91	90
7078557	99	83
7078558	90	88
7078559	93	90
Blank	96	91
LCS	93	89
MS	102	76
MSD	90	82
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13161007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7078551	77	96	74	78	73	77
7078552	66	93	71	75	70	65
7078553	84	108	81	84	79	78
7078554	78	100	77	79	75	74
7078556	85	118	90	96	90	85
7078557	80	101	75	80	75	72
7078558	74	96	75	80	75	70
7078559	73	96	71	77	68	66
Blank	62	81	71	73	70	67
MS	84	108	81	84	79	78
MSD	78	100	77	79	75	74
OPR	96	122	100	105	99	98
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7078551	84	73	75	95	80	79
7078552	84	67	70	87	74	76
7078553	88	74	75	101	84	83
7078554	90	67	70	99	81	81
7078556	105	82	83	114	94	98
7078557	85	68	68	99	82	82
7078558	90	69	69	95	83	83
7078559	87	61	63	93	75	75
Blank	80	61	61	78	78	78
MS	88	74	75	101	84	83
MSD	90	67	70	99	81	81
OPR	118	93	95	118	107	107
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7078551	77	79	87	79	101
7078552	73	73	87	69	94
7078553	82	83	89	85	112
7078554	79	80	89	81	106
7078556	93	94	103	93	125
7078557	79	79	86	84	104

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1394124
Reported: 06/13/13 at 12:13 PM

Surrogate Quality Control

7078558	81	82	89	77	102
7078559	73	71	82	75	100
Blank	75	74	75	62	83
MS	82	83	89	85	112
MSD	79	80	89	81	106
OPR	105	107	117	98	129
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

A-13013
G-139424
S-707855-59

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 5/31/2013
CarrierName: FedEx
AirbillNo: 799897145475

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130531-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-815-SA5A-SB-0.0-0.5	5/31/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-815-SA5A-SB-0.0-0.5	5/31/13 08:35	SO	None	1 - 4 oz glass	10 day													X																	
SL-838-SA5A-SB-0.0-0.5MS	5/31/13 09:35	SO	None	6 - SS-Sleeve	10 day	X	X					X		X											X											MS/MSD
SL-838-SA5A-SB-0.0-0.5MS	5/31/13 09:35	SO	None	1 - 8 oz glass	10 day													X																	MS/MSD
SL-1238-SA5A-SB-0.0-0.5	5/31/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-1238-SA5A-SB-0.0-0.5	5/31/13 09:45	SO	None	1 - 4 oz glass	10 day													X																	
SL-840-SA5A-SB-0.0-0.5	5/31/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-840-SA5A-SB-0.0-0.5	5/31/13 10:45	SO	None	1 - 4 oz glass	10 day													X																	
SL-839-SA5A-SB-0.0-0.5	5/31/13 13:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-839-SA5A-SB-0.0-0.5	5/31/13 13:15	SO	None	1 - 4 oz glass	10 day													X																	
SL-841-SA5A-SB-0.0-0.5	5/31/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-841-SA5A-SB-0.0-0.5	5/31/13 13:45	SO	None	1 - 4 oz glass	10 day													X																	

Special Instructions:

Sampler: V. Cooley

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shuyler Mypel	05/31/2013	1600									
										6/3/13	0850

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G-1394124

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 6/3/13

Time of Receipt: 0850

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	6.8	TB	WI	N	B	9.7 9.9 10.1 10.2 10.0
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 964 **Date/Time:** 6/3/13 0930

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 20, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/06/2013
Group Number: 1395136
SDG: PH047
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
EB1-060513 Water	7083686
EB2-060513 Water	7083687
SL-772-SA5A-SB-0.0-0.5 Soil	7083688
TB-060513 Water	7083689
SL-811-SA5A-SB-0.0-0.5 Soil	7083690
SL-811-SA5A-SB-5.5-6.5 Soil	7083691
SL-813-SA5A-SB-0.0-0.5 Soil	7083692
SL-814-SA5A-SB-0.0-0.5 Soil	7083693
SL-814-SA5A-SB-4.0-5.0 Soil	7083694
SL-858-SA5A-SB-0.0-0.5 Soil	7083695
SL-861-SA5A-SB-0.0-0.5 Soil	7083696
SL-861-SA5A-SB-4.0-5.0 Soil	7083697
SL-861-SA5A-SB-7.0-8.0 Soil	7083698

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.11	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.090	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.087	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.015	J	0.051	0.010	1
12971	Naphthalene	91-20-3	0.085		0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.083	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.083	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.091	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.083	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.083	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.17	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.083	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.083	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.083	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.17	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C15-C20)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C21-C30)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C30 - C40)	n.a.	0.51 U	0.51	0.10	1
10365	EFH (C8-C11)	n.a.	0.10 U	0.10	0.051	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00045 J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0083	1
07049	Cadmium	7440-43-9	0.00036 J	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0084 J	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b. pH (9040B and 9040C)	n.a.	5.2	0.010	0.010	1

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.532	J	1.97	0.363	1
10915	12378-PeCDD	40321-76-4	1.12	JQ	9.84	0.410	1
10915	123478-HxCDD	39227-28-6	0.782	JBQ	9.84	0.260	1
10915	123678-HxCDD	57653-85-7	0.757	JB	9.84	0.280	1
10915	123789-HxCDD	19408-74-3	0.680	JBQ	9.84	0.290	1
10915	1234678-HpCDD	35822-46-9	0.564	JBQ	9.84	0.358	1
10915	OCDD	3268-87-9	1.89	JBQ	19.7	0.360	1
10915	2378-TCDF	51207-31-9	1.97	U	1.97	0.340	1
10915	12378-PeCDF	57117-41-6	1.03	JBQ	9.84	0.249	1
10915	23478-PeCDF	57117-31-4	0.922	JBQ	9.84	0.208	1
10915	123478-HxCDF	70648-26-9	0.953	JB	9.84	0.124	1
10915	123678-HxCDF	57117-44-9	0.500	JBQ	9.84	0.127	1
10915	123789-HxCDF	72918-21-9	0.638	JBQ	9.84	0.141	1
10915	234678-HxCDF	60851-34-5	0.559	JBQ	9.84	0.119	1
10915	1234678-HpCDF	67562-39-4	1.08	JB	9.84	0.141	1
10915	1234789-HpCDF	55673-89-7	0.856	JBQ	9.84	0.171	1
10915	OCDF	39001-02-0	0.876	JBQ	19.7	0.438	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.714				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	49	25 - 164
13C12-12378-PeCDD	49	25 - 181
13C12-123478-HxCDD	51	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	50	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	45	24 - 169
13C12-12378-PeCDF	49	24 - 185
13C12-23478-PeCDF	53	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	47	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161WAE026	06/15/2013 23:41	Holly Berry	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13161WAE026	06/10/2013 18:15	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13164A20A	06/13/2013 22:51	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13164A20A	06/13/2013 22:51	Marie D John	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131630007A	06/13/2013 10:49	Jessica L Miller	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131630007A	06/12/2013 17:00	JoElla L Rice	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131610015A	06/11/2013 16:34	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131610015A	06/10/2013 22:00	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163001	06/15/2013 02:18	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13163001	06/12/2013 10:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	131640635001	06/17/2013 01:47	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	131640639001B	06/18/2013 05:20	Choon Y Tian	1

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

Sample Description: EB1-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083686
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:00 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB105 SDG#: PH047-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06042	Silver	SW-846 6020A	1	131640639001A	06/18/2013 05:20	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131640639001A	06/18/2013 05:20	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131640639001A	06/18/2013 05:20	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131575713007	06/10/2013 09:13	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131640635001	06/16/2013 08:56	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131640639001	06/16/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131575713007	06/07/2013 17:10	Nelli S Markaryan	1
12152	28b. pH (9040B and 9040C)	SW-846 9040C	1	13158121521A	06/07/2013 00:03	Clayton C Litchmore	1

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.054	U	0.054	0.011	1
12971	Acenaphthylene	208-96-8	0.054	U	0.054	0.011	1
12971	Anthracene	120-12-7	0.054	U	0.054	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.054	U	0.054	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.054	U	0.054	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.054	U	0.054	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.054	U	0.054	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.054	U	0.054	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.054	U	0.054	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.054	1
12971	Di-n-butylphthalate	84-74-2	0.11	J	1.1	0.054	1
12971	Chrysene	218-01-9	0.054	U	0.054	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.054	U	0.054	0.011	1
12971	Diethylphthalate	84-66-2	0.092	J	1.1	0.054	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.054	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.12	J	1.1	0.054	1
12971	Fluoranthene	206-44-0	0.054	U	0.054	0.011	1
12971	Fluorene	86-73-7	0.054	U	0.054	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.054	U	0.054	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.012	J	0.054	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.016	J	0.054	0.011	1
12971	Naphthalene	91-20-3	0.086		0.054	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.054	U	0.054	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.054	1
12971	Phenanthrene	85-01-8	0.054	U	0.054	0.032	1
12971	Pyrene	129-00-0	0.054	U	0.054	0.011	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.43	U	0.43	0.085	1
10591	Aroclor 5442	12642-23-8	0.43	U	0.43	0.085	1
10591	Aroclor 5460	11126-42-4	0.43	U	0.43	0.094	1
10591	PCB-1016	12674-11-2	0.43	U	0.43	0.085	1
10591	PCB-1221	11104-28-2	0.43	U	0.43	0.085	1
10591	PCB-1232	11141-16-5	0.43	U	0.43	0.17	1
10591	PCB-1242	53469-21-9	0.43	U	0.43	0.085	1
10591	PCB-1248	12672-29-6	0.43	U	0.43	0.085	1
10591	PCB-1254	11097-69-1	0.43	U	0.43	0.085	1
10591	PCB-1260	11096-82-5	0.43	U	0.43	0.13	1
10591	PCB-1262	37324-23-5	0.43	U	0.43	0.17	1
10591	PCB-1268	11100-14-4	0.43	U	0.43	0.14	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C15-C20)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C21-C30)	n.a.	0.10 U	0.10	0.051	1
10365	EFH (C30 - C40)	n.a.	0.51 U	0.51	0.10	1
10365	EFH (C8-C11)	n.a.	0.10 U	0.10	0.051	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0083	1
07049	Cadmium	7440-43-9	0.00048 J	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b. pH (9040B and 9040C)	n.a.	5.4	0.010	0.010	1

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.670	J	1.97	0.162	1
10915	12378-PeCDD	40321-76-4	0.757	JQ	9.86	0.180	1
10915	123478-HxCDD	39227-28-6	0.588	JBQ	9.86	0.152	1
10915	123678-HxCDD	57653-85-7	9.86	U	9.86	0.164	1
10915	123789-HxCDD	19408-74-3	0.581	JBQ	9.86	0.158	1
10915	1234678-HpCDD	35822-46-9	1.56	JB	9.86	0.190	1
10915	OCDD	3268-87-9	5.08	JB	19.7	0.240	1
10915	2378-TCDF	51207-31-9	0.188	JQ	1.97	0.149	1
10915	12378-PeCDF	57117-41-6	0.765	JBQ	9.86	0.110	1
10915	23478-PeCDF	57117-31-4	0.608	JBQ	9.86	0.0919	1
10915	123478-HxCDF	70648-26-9	0.680	JBQ	9.86	0.0898	1
10915	123678-HxCDF	57117-44-9	0.578	JBQ	9.86	0.0916	1
10915	123789-HxCDF	72918-21-9	1.13	JB	9.86	0.0953	1
10915	234678-HxCDF	60851-34-5	0.471	JB	9.86	0.0867	1
10915	1234678-HpCDF	67562-39-4	1.03	JB	9.86	0.0700	1
10915	1234789-HpCDF	55673-89-7	0.789	JB	9.86	0.0934	1
10915	OCDF	39001-02-0	1.26	JB	19.7	0.216	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.867				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	60	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161WAE026	06/16/2013 00:08	Holly Berry	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13161WAE026	06/10/2013 18:15	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13164A20A	06/13/2013 23:13	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13164A20A	06/13/2013 23:13	Marie D John	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131630007A	06/13/2013 11:08	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131630007A	06/12/2013 17:00	JoElla L Rice	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131610015A	06/11/2013 16:55	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131610015A	06/10/2013 22:00	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163001	06/17/2013 16:56	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13163001	06/12/2013 10:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	131640635001	06/17/2013 01:51	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	131640639001B	06/18/2013 05:23	Choon Y Tian	1

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

Sample Description: EB2-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083687
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:30 by PH

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB205 SDG#: PH047-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06042	Silver	SW-846 6020A	1	131640639001A	06/18/2013 05:23	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131640639001A	06/18/2013 05:23	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131640639001A	06/18/2013 05:23	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131575713007	06/10/2013 09:15	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131640635001	06/16/2013 08:56	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131640639001	06/16/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131575713007	06/07/2013 17:10	Nelli S Markaryan	1
12152	28b. pH (9040B and 9040C)	SW-846 9040C	1	13158121521A	06/07/2013 00:03	Clayton C Litchmore	1

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.4	J	1.8	0.73	1
12969	Acenaphthylene	208-96-8	0.97	J	1.8	0.36	1
12969	Anthracene	120-12-7	0.96	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.2	J	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.6	J	1.8	0.73	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.0	J	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	3.1	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	37,300		42.5	8.19	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.531	1
06935	Arsenic	7440-38-2	7.88		4.25	0.351	1
06946	Barium	7440-39-3	136		1.06	0.0351	1
06947	Beryllium	7440-41-7	1.42		1.06	0.0712	1
07914	Boron	7440-42-8	10.6	U	10.6	0.882	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0351	1
01650	Calcium	7440-70-2	1,770		21.2	4.27	1
06951	Chromium	7440-47-3	34.8		3.19	0.0935	1
06952	Cobalt	7440-48-4	13.4		1.06	0.0956	1
06953	Copper	7440-50-8	13.4		10.6	0.956	5
01654	Iron	7439-89-6	34,300		212	20.2	5
06955	Lead	7439-92-1	12.7		3.19	0.499	1
01656	Lithium	7439-93-2	34.3		4.2	0.58	1

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	5,910		10.6	1.84	1
06958	Manganese	7439-96-5	520		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.807	J	2.12	0.181	1
06961	Nickel	7440-02-0	19.1		2.12	0.117	1
10145	Phosphorus	7723-14-0	224		10.6	0.542	1
01662	Potassium	7440-09-7	2,380		106	14.3	1
01667	Sodium	7440-23-5	758		106	17.7	1
06969	Tin	7440-31-5	3.84	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,580		1.06	0.181	1
06971	Vanadium	7440-62-2	67.7		1.06	0.117	1
06972	Zinc	7440-66-6	54.1		4.25	0.212	1
10146	Zirconium	7440-67-7	2.18	J	5.31	0.882	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.537		0.425	0.106	2
06142	Silver	7440-22-4	0.0763	J	0.212	0.0212	2
06144	Strontium	7440-24-6	24.4		0.425	0.0361	2
06145	Thallium	7440-28-0	0.346		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0250		0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.20		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0458 JBQ	1.08	0.0198	1
11031	12378-PeCDD	40321-76-4	0.111 JBQ	5.41	0.0205	1
11031	123478-HxCDD	39227-28-6	0.114 JBQ	5.41	0.0150	1
11031	123678-HxCDD	57653-85-7	0.170 JB	5.41	0.0165	1
11031	123789-HxCDD	19408-74-3	0.305 JB	5.41	0.0156	1
11031	1234678-HpCDD	35822-46-9	0.350 JBQ	5.41	0.0162	1
11031	OCDD	3268-87-9	2.41 JB	10.8	0.0168	1
11031	2378-TCDF	51207-31-9	0.0152 JQ	1.08	0.0126	1
11031	12378-PeCDF	57117-41-6	0.124 JB	5.41	0.00886	1
11031	23478-PeCDF	57117-31-4	0.101 JB	5.41	0.00864	1
11031	123478-HxCDF	70648-26-9	0.128 JB	5.41	0.0106	1
11031	123678-HxCDF	57117-44-9	0.126 JBQ	5.41	0.00897	1
11031	123789-HxCDF	72918-21-9	0.136 JB	5.41	0.0123	1
11031	234678-HxCDF	60851-34-5	0.147 JB	5.41	0.00919	1
11031	1234678-HpCDF	67562-39-4	0.159 JBQ	5.41	0.00875	1
11031	1234789-HpCDF	55673-89-7	0.160 JB	5.41	0.0166	1
11031	OCDF	39001-02-0	0.366 JBQ	10.8	0.0185	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.125			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 01:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 17:21	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 02:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/13/2013 10:31	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:16	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/13/2013 10:35	Eric L Eby	5
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:22	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:25	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:25	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:25	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:25	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:40	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1

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

Sample Description: SL-772-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083688
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/04/2013 14:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL772 SDG#: PH047-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401A	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: TB-060513 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7083689
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:00

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB105 SDG#: PH047-04TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13164A20A	06/13/2013 21:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13164A20A	06/13/2013 21:35	Marie D John	1

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.3	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.5	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.88	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.4	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.5		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	16		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		39.3	7.58	1
06944	Antimony	7440-36-0	3.93	U	3.93	0.491	1
06935	Arsenic	7440-38-2	4.37		3.93	0.324	1
06946	Barium	7440-39-3	103		0.983	0.0324	1
06947	Beryllium	7440-41-7	0.630	J	0.983	0.0658	1
07914	Boron	7440-42-8	3.25	J	9.83	0.816	1
06949	Cadmium	7440-43-9	0.418	J	0.983	0.0324	1
01650	Calcium	7440-70-2	2,520		19.7	3.95	1
06951	Chromium	7440-47-3	20.8		2.95	0.0865	1
06952	Cobalt	7440-48-4	5.60		0.983	0.0884	1
06953	Copper	7440-50-8	12.7		9.83	0.884	5
01654	Iron	7439-89-6	23,200		39.3	3.73	1
06955	Lead	7439-92-1	9.59		2.95	0.462	1
01656	Lithium	7439-93-2	22.7		3.9	0.54	1
01657	Magnesium	7439-95-4	4,450		9.83	1.70	1
06958	Manganese	7439-96-5	329		0.983	0.0816	1
06960	Molybdenum	7439-98-7	0.170	J	1.97	0.167	1
06961	Nickel	7440-02-0	10.8		1.97	0.108	1
10145	Phosphorus	7723-14-0	522		9.83	0.501	1
01662	Potassium	7440-09-7	4,520		98.3	13.3	1
01667	Sodium	7440-23-5	80.3	J	98.3	16.4	1
06969	Tin	7440-31-5	2.79	J	9.83	0.216	1
06970	Titanium	7440-32-6	1,280		0.983	0.167	1
06971	Vanadium	7440-62-2	36.7		0.983	0.108	1
06972	Zinc	7440-66-6	61.2		3.93	0.197	1
10146	Zirconium	7440-67-7	1.15	J	4.91	0.816	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.135	J	0.393	0.0983	2
06142	Silver	7440-22-4	0.0439	J	0.197	0.0197	2
06144	Strontium	7440-24-6	20.0		0.393	0.0334	2
06145	Thallium	7440-28-0	0.263		0.197	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0128	J	0.0167	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.66		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.111	JB	1.00	0.0202	1
11031	12378-PeCDD	40321-76-4	0.509	JB	5.02	0.0328	1
11031	123478-HxCDD	39227-28-6	0.848	JB	5.02	0.0295	1
11031	123678-HxCDD	57653-85-7	2.10	JB	5.02	0.0313	1
11031	123789-HxCDD	19408-74-3	2.28	JB	5.02	0.0302	1
11031	1234678-HpCDD	35822-46-9	60.9	B	5.02	0.0613	1
11031	OCDD	3268-87-9	1,160	B	10.0	0.0410	1
11031	2378-TCDF	51207-31-9	0.0955	J	1.00	0.0238	1
11031	12378-PeCDF	57117-41-6	0.192	JB	5.02	0.0139	1
11031	23478-PeCDF	57117-31-4	0.219	JB	5.02	0.0133	1
11031	123478-HxCDF	70648-26-9	0.357	JB	5.02	0.0201	1
11031	123678-HxCDF	57117-44-9	0.446	JB	5.02	0.0184	1
11031	123789-HxCDF	72918-21-9	0.371	JB	5.02	0.0230	1
11031	234678-HxCDF	60851-34-5	0.512	JB	5.02	0.0183	1
11031	1234678-HpCDF	67562-39-4	10.8	B	5.02	0.0151	1
11031	1234789-HpCDF	55673-89-7	0.884	JB	5.02	0.0239	1
11031	OCDF	39001-02-0	36.4	B	10.0	0.0188	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.48				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/13/2013 10:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131620008A	06/12/2013 16:52	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131620008A	06/11/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 19:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 03:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:19	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:26	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:28	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:28	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:28	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:28	David K Beck	2

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

Sample Description: SL-811-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083690
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 08:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL811 SDG#: PH047-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:42	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401A	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.13
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	10	1
10592	Aroclor 5442	12642-23-8	35	U	35	10	1
10592	Aroclor 5460	11126-42-4	35	U	35	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.3	1
10592	PCB-1242	53469-21-9	18	U	18	4.3	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		40.8	7.85	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.509	1
06935	Arsenic	7440-38-2	5.63		4.08	0.336	1
06946	Barium	7440-39-3	93.9		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.724	J	1.02	0.0683	1
07914	Boron	7440-42-8	2.11	J	10.2	0.846	1
06949	Cadmium	7440-43-9	0.309	J	1.02	0.0336	1
01650	Calcium	7440-70-2	2,730		20.4	4.10	1
06951	Chromium	7440-47-3	23.0		3.06	0.0897	1
06952	Cobalt	7440-48-4	7.05		1.02	0.0917	1
06953	Copper	7440-50-8	12.2		10.2	0.917	5
01654	Iron	7439-89-6	25,200		40.8	3.87	1
06955	Lead	7439-92-1	7.31		3.06	0.479	1
01656	Lithium	7439-93-2	25.8		4.1	0.56	1
01657	Magnesium	7439-95-4	5,020		10.2	1.76	1
06958	Manganese	7439-96-5	418		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.181	J	2.04	0.173	1
06961	Nickel	7440-02-0	12.3		2.04	0.112	1
10145	Phosphorus	7723-14-0	386		10.2	0.520	1
01662	Potassium	7440-09-7	2,250		102	13.8	1
01667	Sodium	7440-23-5	98.6	J	102	17.0	1
06969	Tin	7440-31-5	3.13	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,330		1.02	0.173	1
06971	Vanadium	7440-62-2	42.3		1.02	0.112	1
06972	Zinc	7440-66-6	53.2		4.08	0.204	1
10146	Zirconium	7440-67-7	1.27	J	5.09	0.846	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.154	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0326	J	0.204	0.0204	2
06144	Strontium	7440-24-6	21.4		0.408	0.0346	2
06145	Thallium	7440-28-0	0.249		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0121	J	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.75		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0162	1
11031	12378-PeCDD	40321-76-4	0.112	JB	5.18	0.0178	1
11031	123478-HxCDD	39227-28-6	0.151	JBQ	5.18	0.0151	1
11031	123678-HxCDD	57653-85-7	0.164	JB	5.18	0.0161	1
11031	123789-HxCDD	19408-74-3	0.236	JBQ	5.18	0.0165	1
11031	1234678-HpCDD	35822-46-9	0.703	JB	5.18	0.0173	1
11031	OCDD	3268-87-9	7.20	JB	10.4	0.0149	1
11031	2378-TCDF	51207-31-9	0.0212	J	1.04	0.0124	1
11031	12378-PeCDF	57117-41-6	0.125	JBQ	5.18	0.00892	1
11031	23478-PeCDF	57117-31-4	0.119	JB	5.18	0.00850	1
11031	123478-HxCDF	70648-26-9	0.164	JB	5.18	0.00934	1
11031	123678-HxCDF	57117-44-9	0.146	JB	5.18	0.00860	1
11031	123789-HxCDF	72918-21-9	0.178	JB	5.18	0.0120	1
11031	234678-HxCDF	60851-34-5	0.165	JB	5.18	0.00808	1
11031	1234678-HpCDF	67562-39-4	0.245	JB	5.18	0.00693	1
11031	1234789-HpCDF	55673-89-7	0.101	JB	5.18	0.0125	1
11031	OCDF	39001-02-0	0.635	JB	10.4	0.0152	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.245				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/13/2013 10:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/09/2013 23:01	Laura M Krieger	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315731330	06/06/2013 15:20	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315731330	06/06/2013 15:20	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131620008A	06/12/2013 17:10	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131620008A	06/11/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 18:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 04:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:23	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:29	Katlin N Cataldi	1

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

Sample Description: SL-811-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083691
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:00 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

811-5 SDG#: PH047-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:30	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:30	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:30	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:30	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:44	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401A	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.1	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.0	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.82	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.79	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.3		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.0	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.7		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.68	1
12969	Pyrene	129-00-0	2.0		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	28		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.2	7.74	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.502	1
06935	Arsenic	7440-38-2	3.62	J	4.02	0.331	1
06946	Barium	7440-39-3	107		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.557	J	1.00	0.0673	1
07914	Boron	7440-42-8	3.44	J	10.0	0.833	1
06949	Cadmium	7440-43-9	0.507	J	1.00	0.0331	1
01650	Calcium	7440-70-2	2,360		20.1	4.04	1
06951	Chromium	7440-47-3	18.1		3.01	0.0884	1
06952	Cobalt	7440-48-4	5.11		1.00	0.0904	1
06953	Copper	7440-50-8	11.6		10.0	0.904	5
01654	Iron	7439-89-6	20,700		40.2	3.82	1
06955	Lead	7439-92-1	11.7		3.01	0.472	1
01656	Lithium	7439-93-2	21.6		4.0	0.55	1

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,960		10.0	1.74	1
06958	Manganese	7439-96-5	341		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.251	J	2.01	0.171	1
06961	Nickel	7440-02-0	9.68		2.01	0.110	1
10145	Phosphorus	7723-14-0	492		10.0	0.512	1
01662	Potassium	7440-09-7	4,010		100	13.6	1
01667	Sodium	7440-23-5	69.3	J	100	16.8	1
06969	Tin	7440-31-5	2.85	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,250		1.00	0.171	1
06971	Vanadium	7440-62-2	32.7		1.00	0.110	1
06972	Zinc	7440-66-6	58.5		4.02	0.201	1
10146	Zirconium	7440-67-7	5.02	U	5.02	0.833	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.130	J	0.402	0.100	2
06142	Silver	7440-22-4	0.0493	J	0.201	0.0201	2
06144	Strontium	7440-24-6	18.4		0.402	0.0341	2
06145	Thallium	7440-28-0	0.236		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.41		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0757	JB	0.990	0.0291	1
11031	12378-PeCDD	40321-76-4	0.362	JB	4.95	0.0342	1
11031	123478-HxCDD	39227-28-6	0.575	JB	4.95	0.0315	1
11031	123678-HxCDD	57653-85-7	1.56	JB	4.95	0.0340	1
11031	123789-HxCDD	19408-74-3	1.45	JB	4.95	0.0319	1
11031	1234678-HpCDD	35822-46-9	35.4	B	4.95	0.0573	1
11031	OCDD	3268-87-9	676	B	9.90	0.0377	1
11031	2378-TCDF	51207-31-9	0.257	J	0.990	0.0412	1
11031	12378-PeCDF	57117-41-6	0.514	JB	4.95	0.0192	1
11031	23478-PeCDF	57117-31-4	0.370	JB	4.95	0.0190	1
11031	123478-HxCDF	70648-26-9	0.242	JBQ	4.95	0.0238	1
11031	123678-HxCDF	57117-44-9	0.255	JB	4.95	0.0207	1
11031	123789-HxCDF	72918-21-9	0.303	JB	4.95	0.0266	1
11031	234678-HxCDF	60851-34-5	0.301	JB	4.95	0.0214	1
11031	1234678-HpCDF	67562-39-4	3.95	JB	4.95	0.0131	1
11031	1234789-HpCDF	55673-89-7	0.303	JBQ	4.95	0.0263	1
11031	OCDF	39001-02-0	11.6	B	9.90	0.0222	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.63				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 02:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 20:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 04:58	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/13/2013 10:47	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:35	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:33	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:32	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:32	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:46	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1

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

Sample Description: SL-813-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083692
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 09:45 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL813 SDG#: PH047-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401A	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.58	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.74	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.77	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.2		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.69	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.71	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.9		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.90	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.5	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.3		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	23		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,800		40.5	7.81	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.506	1
06935	Arsenic	7440-38-2	2.96	J	4.05	0.334	1
06946	Barium	7440-39-3	80.9		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.403	J	1.01	0.0678	1
07914	Boron	7440-42-8	3.42	J	10.1	0.840	1
06949	Cadmium	7440-43-9	0.462	J	1.01	0.0334	1
01650	Calcium	7440-70-2	1,680		20.2	4.07	1
06951	Chromium	7440-47-3	14.5		3.04	0.0891	1
06952	Cobalt	7440-48-4	4.01		1.01	0.0911	1
06953	Copper	7440-50-8	9.36	J	10.1	0.911	5
01654	Iron	7439-89-6	14,700		40.5	3.85	1
06955	Lead	7439-92-1	7.59		3.04	0.476	1
01656	Lithium	7439-93-2	14.6		4.0	0.56	1

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	2,870		10.1	1.75	1
06958	Manganese	7439-96-5	275		1.01	0.0840	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.172	1
06961	Nickel	7440-02-0	7.82		2.02	0.111	1
10145	Phosphorus	7723-14-0	348		10.1	0.516	1
01662	Potassium	7440-09-7	2,890		101	13.7	1
01667	Sodium	7440-23-5	65.7	J	101	16.9	1
06969	Tin	7440-31-5	2.59	J	10.1	0.223	1
06970	Titanium	7440-32-6	965		1.01	0.172	1
06971	Vanadium	7440-62-2	25.2		1.01	0.111	1
06972	Zinc	7440-66-6	44.7		4.05	0.202	1
10146	Zirconium	7440-67-7	1.02	J	5.06	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.102	J	0.405	0.101	2
06142	Silver	7440-22-4	0.105	J	0.202	0.0202	2
06144	Strontium	7440-24-6	14.5		0.405	0.0344	2
06145	Thallium	7440-28-0	0.199	J	0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0118	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.18		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0318	JBQ	0.978	0.0210	1
11031	12378-PeCDD	40321-76-4	0.277	JB	4.89	0.0292	1
11031	123478-HxCDD	39227-28-6	0.627	JB	4.89	0.0287	1
11031	123678-HxCDD	57653-85-7	1.74	JB	4.89	0.0312	1
11031	123789-HxCDD	19408-74-3	1.34	JB	4.89	0.0284	1
11031	1234678-HpCDD	35822-46-9	50.6	B	4.89	0.0603	1
11031	OCDD	3268-87-9	762	B	9.78	0.0355	1
11031	2378-TCDF	51207-31-9	0.150	J	0.978	0.0370	1
11031	12378-PeCDF	57117-41-6	0.286	JB	4.89	0.0181	1
11031	23478-PeCDF	57117-31-4	0.215	JB	4.89	0.0185	1
11031	123478-HxCDF	70648-26-9	0.429	JB	4.89	0.0240	1
11031	123678-HxCDF	57117-44-9	0.513	JB	4.89	0.0222	1
11031	123789-HxCDF	72918-21-9	0.346	JB	4.89	0.0270	1
11031	234678-HxCDF	60851-34-5	0.570	JB	4.89	0.0210	1
11031	1234678-HpCDF	67562-39-4	12.5	B	4.89	0.0173	1
11031	1234789-HpCDF	55673-89-7	0.987	JB	4.89	0.0275	1
11031	OCDF	39001-02-0	49.3	B	9.78	0.0204	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.81				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	96	32 - 141
13C12-123678-HxCDD	95	28 - 130
13C12-123789-HxCDD	93	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	95	26 - 152
13C12-123678-HxCDF	104	26 - 123
13C12-234678-HxCDF	105	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	122	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 02:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 20:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 05:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/13/2013 10:54	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:38	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:37	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:35	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:35	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:35	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:35	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:48	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1

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

Sample Description: SL-814-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083693
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:25 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL814 SDG#: PH047-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		41.9	8.07	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.523	1
06935	Arsenic	7440-38-2	5.82		4.19	0.345	1
06946	Barium	7440-39-3	94.4		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.758	J	1.05	0.0701	1
07914	Boron	7440-42-8	2.41	J	10.5	0.869	1
06949	Cadmium	7440-43-9	0.334	J	1.05	0.0345	1
01650	Calcium	7440-70-2	2,760		20.9	4.21	1
06951	Chromium	7440-47-3	22.5		3.14	0.0921	1

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
06952	Cobalt	7440-48-4	7.79		1.05	0.0942	1
06953	Copper	7440-50-8	9.98	J	10.5	0.942	5
01654	Iron	7439-89-6	25,200		41.9	3.98	1
06955	Lead	7439-92-1	7.62		3.14	0.492	1
01656	Lithium	7439-93-2	30.4		4.2	0.58	1
01657	Magnesium	7439-95-4	4,700		10.5	1.81	1
06958	Manganese	7439-96-5	357		1.05	0.0869	1
06960	Molybdenum	7439-98-7	2.09	U	2.09	0.178	1
06961	Nickel	7440-02-0	10.8		2.09	0.115	1
10145	Phosphorus	7723-14-0	184		10.5	0.534	1
01662	Potassium	7440-09-7	1,460		105	14.1	1
01667	Sodium	7440-23-5	134		105	17.5	1
06969	Tin	7440-31-5	3.14	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,310		1.05	0.178	1
06971	Vanadium	7440-62-2	44.0		1.05	0.115	1
06972	Zinc	7440-66-6	47.7		4.19	0.209	1
10146	Zirconium	7440-67-7	1.36	J	5.23	0.869	1
	SW-846 6020A		mg/kg		mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.419	U	0.419	0.105	2
06142	Silver	7440-22-4	0.0530	J	0.209	0.0209	2
06144	Strontium	7440-24-6	22.0		0.419	0.0356	2
06145	Thallium	7440-28-0	0.211		0.209	0.0314	2
	SW-846 7471B		mg/kg		mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.0105	J	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		Std. Units		Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	6.62		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0188 JBQ	1.02	0.0142	1
11031	12378-PeCDD	40321-76-4	0.0797 JBQ	5.12	0.0138	1
11031	123478-HxCDD	39227-28-6	0.0398 JBQ	5.12	0.0111	1
11031	123678-HxCDD	57653-85-7	0.0409 JB	5.12	0.0118	1
11031	123789-HxCDD	19408-74-3	0.0544 JBQ	5.12	0.0118	1
11031	1234678-HpCDD	35822-46-9	0.132 JBQ	5.12	0.0124	1
11031	OCDD	3268-87-9	1.05 JB	10.2	0.0146	1
11031	2378-TCDF	51207-31-9	0.0310 JQ	1.02	0.0109	1
11031	12378-PeCDF	57117-41-6	0.116 JB	5.12	0.00782	1
11031	23478-PeCDF	57117-31-4	0.0784 JB	5.12	0.00772	1
11031	123478-HxCDF	70648-26-9	0.0618 JBQ	5.12	0.00708	1
11031	123678-HxCDF	57117-44-9	0.0515 JBQ	5.12	0.00655	1
11031	123789-HxCDF	72918-21-9	0.0399 JB	5.12	0.00803	1
11031	234678-HxCDF	60851-34-5	0.0522 JBQ	5.12	0.00592	1
11031	1234678-HpCDF	67562-39-4	0.0580 JB	5.12	0.00560	1
11031	1234789-HpCDF	55673-89-7	0.0414 JBQ	5.12	0.00983	1
11031	OCDF	39001-02-0	0.115 JB	10.2	0.0142	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0359			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	92	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	101	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 03:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/09/2013 23:39	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315731330	06/06/2013 15:23	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315731330	06/06/2013 15:23	Larry E Bevins	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 18:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/16/2013 06:51	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:42	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:41	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:37	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:37	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:37	David K Beck	2

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

Sample Description: SL-814-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083694
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 10:40 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

814-4 SDG#: PH047-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:37	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:54	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	18	U	18	7.0	10
12969	Acenaphthylene	208-96-8	18	U	18	3.5	10
12969	Anthracene	120-12-7	5.9	J	18	3.5	10
12969	Benzo(a)anthracene	56-55-3	17	J	18	7.0	10
12969	Benzo(a)pyrene	50-32-8	17	J	18	7.0	10
12969	Benzo(b)fluoranthene	205-99-2	40		18	7.0	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	14	J	18	7.0	10
12969	Benzo(k)fluoranthene	207-08-9	16	J	18	7.0	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	63	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	63	10
12969	Chrysene	218-01-9	51		18	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	18	U	18	7.0	10
12969	Diethylphthalate	84-66-2	190	U	190	63	10
12969	Dimethylphthalate	131-11-3	190	U	190	63	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	63	10
12969	Fluoranthene	206-44-0	74		18	7.0	10
12969	Fluorene	86-73-7	18	U	18	7.0	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	9.5	J	18	7.0	10
12969	1-Methylnaphthalene	90-12-0	18	U	18	7.0	10
12969	2-Methylnaphthalene	91-57-6	18	U	18	7.0	10
12969	Naphthalene	91-20-3	18	U	18	7.0	10
12969	N-Nitrosodimethylamine	62-75-9	18	U	18	7.0	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	63	10
12969	Phenanthrene	85-01-8	35		18	7.0	10
12969	Pyrene	129-00-0	54		18	7.0	10
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	53	U	53	21	10
12952	EFH (C15-C20)	n.a.	53	U	53	21	10
12952	EFH (C21-C30)	n.a.	110		53	21	10
12952	EFH (C30-C40)	n.a.	290		110	42	10
12952	EFH (C8-C11)	n.a.	53	U	53	21	10
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		41.2	7.94	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.515	1
06935	Arsenic	7440-38-2	4.00	J	4.12	0.340	1
06946	Barium	7440-39-3	103		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.567	J	1.03	0.0690	1
07914	Boron	7440-42-8	2.88	J	10.3	0.855	1
06949	Cadmium	7440-43-9	0.694	J	1.03	0.0340	1
01650	Calcium	7440-70-2	3,370		20.6	4.14	1
06951	Chromium	7440-47-3	25.1		3.09	0.0906	1
06952	Cobalt	7440-48-4	7.71		1.03	0.0927	1
06953	Copper	7440-50-8	10.3	U	10.3	0.927	5
01654	Iron	7439-89-6	23,100		206	19.6	5
06955	Lead	7439-92-1	26.2		3.09	0.484	1
01656	Lithium	7439-93-2	22.8		4.1	0.57	1

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	5,270		10.3	1.78	1
06958	Manganese	7439-96-5	358		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.206	J	2.06	0.175	1
06961	Nickel	7440-02-0	14.1		2.06	0.113	1
10145	Phosphorus	7723-14-0	528		10.3	0.525	1
01662	Potassium	7440-09-7	3,650		103	13.9	1
01667	Sodium	7440-23-5	87.1	J	103	17.2	1
06969	Tin	7440-31-5	2.98	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,210		1.03	0.175	1
06971	Vanadium	7440-62-2	42.4		1.03	0.113	1
06972	Zinc	7440-66-6	190		4.12	0.206	1
10146	Zirconium	7440-67-7	0.902	J	5.15	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.135	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0750	J	0.206	0.0206	2
06144	Strontium	7440-24-6	19.0		0.412	0.0350	2
06145	Thallium	7440-28-0	0.231		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0583		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.24		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	2.23	B	1.01	0.0539	1
11031	12378-PeCDD	40321-76-4	22.8	B	5.07	0.0659	1
11031	123478-HxCDD	39227-28-6	44.9	B	5.07	0.0808	1
11031	123678-HxCDD	57653-85-7	144	B	5.07	0.0854	1
11031	123789-HxCDD	19408-74-3	105	B	5.07	0.0842	1
11031	1234678-HpCDD	35822-46-9	3,820	EB	5.07	0.209	1
11031	OCDD	3268-87-9	101,000 EB		10.1	0.0983	10
11031	2378-TCDF	51207-31-9	0.639	J	1.01	0.0586	1
11031	12378-PeCDF	57117-41-6	2.82	JB	5.07	0.0340	1
11031	23478-PeCDF	57117-31-4	2.16	JB	5.07	0.0319	1
11031	123478-HxCDF	70648-26-9	15.2	B	5.07	0.0453	1
11031	123678-HxCDF	57117-44-9	5.11	B	5.07	0.0443	1
11031	123789-HxCDF	72918-21-9	5.07	UB	5.07	0.0496	1
11031	234678-HxCDF	60851-34-5	7.32	B	5.07	0.0423	1
11031	1234678-HpCDF	67562-39-4	201	B	5.07	0.0536	1
11031	1234789-HpCDF	55673-89-7	11.0	B	5.07	0.0657	1
11031	OCDF	39001-02-0	839	B	10.1	0.0544	1

OCDD was reported from a df=10 dilution. File DF18471-13JUN19-21

Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	129				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	84	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	103	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 04:04	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 20:48	Heather E Williams	10
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/17/2013 01:05	Joseph D Anderson	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/17/2013 01:05	Joseph D Anderson	10
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/13/2013 11:13	Eric L Eby	5
01654	Iron	SW-846 6010C	1	131600637003	06/13/2013 11:13	Eric L Eby	5
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:52	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:44	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:57	Katlin N Cataldi	1

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

Sample Description: SL-858-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083695
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 13:50 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL859 SDG#: PH047-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.9	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	8.5	J	17	6.9	10
12969	Benzo(a)pyrene	50-32-8	7.6	J	17	6.9	10
12969	Benzo(b)fluoranthene	205-99-2	26		17	6.9	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.9	10
12969	Benzo(k)fluoranthene	207-08-9	8.9	J	17	6.9	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	62	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	62	10
12969	Chrysene	218-01-9	37		17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.9	10
12969	Diethylphthalate	84-66-2	190	U	190	62	10
12969	Dimethylphthalate	131-11-3	190	U	190	62	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	62	10
12969	Fluoranthene	206-44-0	45		17	6.9	10
12969	Fluorene	86-73-7	17	U	17	6.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.9	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.9	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.9	10
12969	Naphthalene	91-20-3	17	U	17	6.9	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.9	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	62	10
12969	Phenanthrene	85-01-8	16	J	17	6.9	10
12969	Pyrene	129-00-0	31		17	6.9	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.6	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	52	U	52	21	10
12952	EFH (C15-C20)	n.a.	52	U	52	21	10
12952	EFH (C21-C30)	n.a.	71		52	21	10
12952	EFH (C30-C40)	n.a.	210		100	41	10
12952	EFH (C8-C11)	n.a.	52	U	52	21	10
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,100		41.0	7.91	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.513	1
06935	Arsenic	7440-38-2	4.71		4.10	0.339	1
06946	Barium	7440-39-3	101		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.606	J	1.03	0.0687	1
07914	Boron	7440-42-8	3.52	J	10.3	0.852	1
06949	Cadmium	7440-43-9	0.568	J	1.03	0.0339	1
01650	Calcium	7440-70-2	3,670		20.5	4.12	1
06951	Chromium	7440-47-3	34.2		3.08	0.0903	1
06952	Cobalt	7440-48-4	6.17		1.03	0.0923	1
06953	Copper	7440-50-8	10.3	U	10.3	0.923	5
01654	Iron	7439-89-6	23,800		41.0	3.90	1
06955	Lead	7439-92-1	69.6		3.08	0.482	1
01656	Lithium	7439-93-2	23.0		4.1	0.56	1
01657	Magnesium	7439-95-4	4,840		10.3	1.77	1
06958	Manganese	7439-96-5	320		1.03	0.0852	1
06960	Molybdenum	7439-98-7	0.257	J	2.05	0.174	1
06961	Nickel	7440-02-0	13.0		2.05	0.113	1
10145	Phosphorus	7723-14-0	474		10.3	0.523	1
01662	Potassium	7440-09-7	3,460		103	13.9	1
01667	Sodium	7440-23-5	85.7	J	103	17.1	1
06969	Tin	7440-31-5	2.90	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,230		1.03	0.174	1
06971	Vanadium	7440-62-2	41.9		1.03	0.113	1
06972	Zinc	7440-66-6	108		4.10	0.205	1
10146	Zirconium	7440-67-7	0.941	J	5.13	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.157	J	0.410	0.103	2
06142	Silver	7440-22-4	0.0831	J	0.205	0.0205	2
06144	Strontium	7440-24-6	21.8		0.410	0.0349	2
06145	Thallium	7440-28-0	0.264		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0248		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.59		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	2378-TCDD		1746-01-6	0.324	JB	1.02	0.0319	1
11031	12378-PeCDD		40321-76-4	2.04	JB	5.08	0.0517	1
11031	123478-HxCDD		39227-28-6	3.54	JB	5.08	0.0361	1
11031	123678-HxCDD		57653-85-7	7.31	B	5.08	0.0376	1
11031	123789-HxCDD		19408-74-3	7.39	B	5.08	0.0375	1
11031	1234678-HpCDD		35822-46-9	198	B	5.08	0.0955	1
11031	OCDD		3268-87-9	3,740	B	10.2	0.0726	1
11031	2378-TCDF		51207-31-9	0.584	J	1.02	0.0519	1
11031	12378-PeCDF		57117-41-6	1.23	JB	5.08	0.0312	1
11031	23478-PeCDF		57117-31-4	0.680	JB	5.08	0.0291	1
11031	123478-HxCDF		70648-26-9	1.25	JB	5.08	0.0257	1
11031	123678-HxCDF		57117-44-9	0.835	JB	5.08	0.0266	1
11031	123789-HxCDF		72918-21-9	0.537	JB	5.08	0.0287	1
11031	234678-HxCDF		60851-34-5	1.04	JB	5.08	0.0240	1
11031	1234678-HpCDF		67562-39-4	16.2	B	5.08	0.0336	1
11031	1234789-HpCDF		55673-89-7	1.02	JB	5.08	0.0409	1
11031	OCDF		39001-02-0	49.3	B	10.2	0.0209	1
Toxic Equivalents	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	8.14				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	85	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 04:37	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131620008A	06/12/2013 17:29	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131620008A	06/11/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 21:30	Heather E Williams	10
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/17/2013 02:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/13/2013 11:17	Eric L Eby	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 21:56	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:47	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:47	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:47	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:47	David K Beck	2

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

Sample Description: SL-861-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083696
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 14:20 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL861 SDG#: PH047-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 19:59	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.56
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons		**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)		n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)		n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)		n.a.	5.5	U	5.5	2.2	1
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum		7429-90-5	21,600		44.1	8.49	1
06944	Antimony		7440-36-0	4.41	U	4.41	0.551	1
06935	Arsenic		7440-38-2	7.20		4.41	0.363	1
06946	Barium		7440-39-3	60.8		1.10	0.0363	1
06947	Beryllium		7440-41-7	0.848	J	1.10	0.0738	1
07914	Boron		7440-42-8	1.38	J	11.0	0.914	1
06949	Cadmium		7440-43-9	0.213	J	1.10	0.0363	1
01650	Calcium		7440-70-2	2,300		22.0	4.43	1
06951	Chromium		7440-47-3	27.6		3.30	0.0969	1
06952	Cobalt		7440-48-4	4.65		1.10	0.0991	1
06953	Copper		7440-50-8	15.1		11.0	0.991	5
01654	Iron		7439-89-6	28,500		44.1	4.19	1
06955	Lead		7439-92-1	9.37		3.30	0.518	1
01656	Lithium		7439-93-2	28.2		4.4	0.61	1
01657	Magnesium		7439-95-4	5,390		11.0	1.91	1
06958	Manganese		7439-96-5	212		1.10	0.0914	1
06960	Molybdenum		7439-98-7	0.291	J	2.20	0.187	1
06961	Nickel		7440-02-0	10.9		2.20	0.121	1
10145	Phosphorus		7723-14-0	196		11.0	0.562	1
01662	Potassium		7440-09-7	2,040		110	14.9	1
01667	Sodium		7440-23-5	94.9	J	110	18.4	1
06969	Tin		7440-31-5	3.18	J	11.0	0.242	1
06970	Titanium		7440-32-6	1,360		1.10	0.187	1
06971	Vanadium		7440-62-2	52.5		1.10	0.121	1
06972	Zinc		7440-66-6	49.2		4.41	0.220	1
10146	Zirconium		7440-67-7	1.70	J	5.51	0.914	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.441	U	0.441	0.110	2
06142	Silver		7440-22-4	0.0513	J	0.220	0.0220	2
06144	Strontium		7440-24-6	28.3		0.441	0.0374	2
06145	Thallium		7440-28-0	0.260		0.220	0.0330	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0148	J	0.0171	0.0103	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	7.38		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.							
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3		n.a.	9.2		0.10	0.10	1

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0172 JB	1.05	0.0152	1
11031	12378-PeCDD	40321-76-4	5.26 U	5.26	0.0144	1
11031	123478-HxCDD	39227-28-6	0.0322 JBQ	5.26	0.0165	1
11031	123678-HxCDD	57653-85-7	0.0292 JBQ	5.26	0.0175	1
11031	123789-HxCDD	19408-74-3	0.0776 JBQ	5.26	0.0180	1
11031	1234678-HpCDD	35822-46-9	1.20 JB	5.26	0.0312	1
11031	OCDD	3268-87-9	14.2 B	10.5	0.0416	1
11031	2378-TCDF	51207-31-9	1.05 U	1.05	0.00826	1
11031	12378-PeCDF	57117-41-6	0.0535 JBQ	5.26	0.00837	1
11031	23478-PeCDF	57117-31-4	0.0263 JBQ	5.26	0.00848	1
11031	123478-HxCDF	70648-26-9	0.0432 JBQ	5.26	0.0149	1
11031	123678-HxCDF	57117-44-9	0.0325 JBQ	5.26	0.0135	1
11031	123789-HxCDF	72918-21-9	0.0204 JBQ	5.26	0.0182	1
11031	234678-HxCDF	60851-34-5	0.0267 JBQ	5.26	0.0131	1
11031	1234678-HpCDF	67562-39-4	0.399 JB	5.26	0.0144	1
11031	1234789-HpCDF	55673-89-7	0.115 JBQ	5.26	0.0279	1
11031	OCDF	39001-02-0	1.28 JB	10.5	0.0219	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0378			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 05:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/10/2013 00:17	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315731330	06/06/2013 15:21	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315731330	06/06/2013 15:22	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131620008A	06/12/2013 17:47	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131620008A	06/11/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 19:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/17/2013 02:58	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/13/2013 11:20	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:46	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/13/2013 11:20	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 22:00	Katlin N Cataldi	1

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

Sample Description: SL-861-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083697
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:05 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-4 SDG#: PH047-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:49	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:49	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:49	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:49	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 20:01	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	37	U	37	11	1
10592	Aroclor 5442	12642-23-8	37	U	37	11	1
10592	Aroclor 5460	11126-42-4	37	U	37	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.7	1
10592	PCB-1221	11104-28-2	19	U	19	5.7	1
10592	PCB-1232	11141-16-5	19	U	19	4.6	1
10592	PCB-1242	53469-21-9	19	U	19	4.6	1
10592	PCB-1248	12672-29-6	19	U	19	3.7	1
10592	PCB-1254	11097-69-1	19	U	19	4.9	1
10592	PCB-1260	11096-82-5	19	U	19	4.4	1
10592	PCB-1262	37324-23-5	19	U	19	3.7	1
10592	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons		**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)		n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)		n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)		n.a.	5.6	U	5.6	2.2	1
Metals		**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum		7429-90-5	22,300		43.4	8.37	1
06944	Antimony		7440-36-0	4.34	U	4.34	0.543	1
06935	Arsenic		7440-38-2	7.12		4.34	0.358	1
06946	Barium		7440-39-3	52.1		1.09	0.0358	1
06947	Beryllium		7440-41-7	0.748	J	1.09	0.0728	1
07914	Boron		7440-42-8	1.64	J	10.9	0.901	1
06949	Cadmium		7440-43-9	0.217	J	1.09	0.0358	1
01650	Calcium		7440-70-2	2,020		21.7	4.37	1
06951	Chromium		7440-47-3	24.3		3.26	0.0956	1
06952	Cobalt		7440-48-4	3.78		1.09	0.0977	1
06953	Copper		7440-50-8	12.4		10.9	0.977	5
01654	Iron		7439-89-6	28,200		43.4	4.13	1
06955	Lead		7439-92-1	8.74		3.26	0.510	1
01656	Lithium		7439-93-2	28.5		4.3	0.60	1
01657	Magnesium		7439-95-4	4,680		10.9	1.88	1
06958	Manganese		7439-96-5	172		1.09	0.0901	1
06960	Molybdenum		7439-98-7	0.349	J	2.17	0.185	1
06961	Nickel		7440-02-0	9.48		2.17	0.119	1
10145	Phosphorus		7723-14-0	186		10.9	0.554	1
01662	Potassium		7440-09-7	1,800		109	14.7	1
01667	Sodium		7440-23-5	114		109	18.1	1
06969	Tin		7440-31-5	3.21	J	10.9	0.239	1
06970	Titanium		7440-32-6	1,290		1.09	0.185	1
06971	Vanadium		7440-62-2	49.6		1.09	0.119	1
06972	Zinc		7440-66-6	42.8		4.34	0.217	1
10146	Zirconium		7440-67-7	1.53	J	5.43	0.901	1
		SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium		7782-49-2	0.110	J	0.434	0.109	2
06142	Silver		7440-22-4	0.0767	J	0.217	0.0217	2
06144	Strontium		7440-24-6	25.0		0.434	0.0369	2
06145	Thallium		7440-28-0	0.233		0.217	0.0326	2
		SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A		7439-97-6	0.0174	J	0.0185	0.0111	1
Wet Chemistry		**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D		n.a.	7.07		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.							
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3		n.a.	10.6		0.10	0.10	1

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

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

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0172 JBQ	1.10	0.0132	1
11031	12378-PeCDD	40321-76-4	5.49 U	5.49	0.0150	1
11031	123478-HxCDD	39227-28-6	0.0276 JBQ	5.49	0.0154	1
11031	123678-HxCDD	57653-85-7	0.0560 JB	5.49	0.0161	1
11031	123789-HxCDD	19408-74-3	0.0701 JBQ	5.49	0.0169	1
11031	1234678-HpCDD	35822-46-9	0.613 JB	5.49	0.0275	1
11031	OCDD	3268-87-9	7.57 JB	11.0	0.0331	1
11031	2378-TCDF	51207-31-9	1.10 U	1.10	0.00917	1
11031	12378-PeCDF	57117-41-6	0.0713 JBQ	5.49	0.00772	1
11031	23478-PeCDF	57117-31-4	0.0198 JBQ	5.49	0.00749	1
11031	123478-HxCDF	70648-26-9	0.0424 JBQ	5.49	0.0116	1
11031	123678-HxCDF	57117-44-9	5.49 U	5.49	0.0111	1
11031	123789-HxCDF	72918-21-9	0.0399 JBQ	5.49	0.0139	1
11031	234678-HxCDF	60851-34-5	0.0514 JBQ	5.49	0.0106	1
11031	1234678-HpCDF	67562-39-4	0.159 JB	5.49	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0728 JB	5.49	0.0214	1
11031	OCDF	39001-02-0	0.363 JB	11.0	0.0309	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0164			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13158SLB026	06/14/2013 05:42	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13158SLB026	06/07/2013 17:40	Sally L Appleyard	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/10/2013 00:55	Laura M Krieger	24.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315731330	06/06/2013 15:19	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315731330	06/06/2013 15:19	Larry E Bevins	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131620008A	06/12/2013 18:06	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131620008A	06/11/2013 18:30	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630009A	06/13/2013 19:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630009A	06/12/2013 17:15	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13163006	06/17/2013 03:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13163006	06/12/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131600637003	06/13/2013 11:28	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131600637003	06/14/2013 05:50	Tara L Snyder	5
01654	Iron	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131600637003	06/12/2013 22:04	Katlin N Cataldi	1

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

Sample Description: SL-861-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7083698
LLI Group # 1395136
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/05/2013 15:15 by VC

Submitted: 06/06/2013 09:20
Reported: 06/20/2013 12:10

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

861-7 SDG#: PH047-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131600637003B	06/11/2013 20:51	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637003A	06/11/2013 20:51	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637003A	06/11/2013 20:51	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637003A	06/11/2013 20:51	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638002	06/11/2013 20:03	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637003	06/11/2013 00:03	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638002	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13157039401B	06/06/2013 23:17	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13158SLB026	Sample number(s): 7083688,7083690-7083698									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	91		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	79		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	120		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	98		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	79		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	84		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	91		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	87		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	101		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	85		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	86		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	90		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	87		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	92		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	87		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Batch number: 13161WAE026	Sample number(s): 7083686-7083687									
Acenaphthene	0.050	U	0.050	0.010	ug/l	105	107	65-124	2	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	107	108	72-113	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	111	113	70-117	2	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	99	102	75-115	2	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	99	102	72-120	3	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	116	108	74-130	7	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	95	97	70-130	2	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	101	103	63-121	2	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	106	116	74-118	9	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	95	97	40-138	2	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	113	118	70-145	4	30
Chrysene	0.050	U	0.050	0.010	ug/l	110	112	75-112	2	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	97	98	66-122	1	30
Diethylphthalate	0.076	J	1.0	0.050	ug/l	112	118	74-129	5	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	103	104	40-119	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	89	83	70-143	6	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	105	108	73-116	3	30
Fluorene	0.050	U	0.050	0.010	ug/l	103	105	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	93	95	66-122	2	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	111	112	71-120	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	109	110	74-119	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	103	105	67-118	1	30
N-Nitrosodimethylamine	0.71		0.050	0.010	ug/l	98	98	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	75	72	57-145	3	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	107	110*	72-109	3	30
Pyrene	0.050	U	0.050	0.010	ug/l	108	112	71-116	3	30
Batch number: 13160A16A	Sample number(s): 7083691,7083694,7083697-7083698									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 13164A20A	Sample number(s): 7083686-7083687,7083689									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	100	75-135	2	30
Batch number: 131620008A	Sample number(s): 7083690-7083691,7083696-7083698									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	75	73	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	101		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	103		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131630007A	Sample number(s): 7083686-7083687									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	52	53	35-84	2	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	87	94	69-120	8	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	88	98	69-128	11	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 131610015A	Sample number(s): 7083686-7083687									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	93	97	70-130	5	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	100	104	70-130	4	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	100	104	70-130	4	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	99	107	70-130	7	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	68*	71	70-130	5	30
Batch number: 131630009A	Sample number(s): 7083688,7083690-7083698									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	92		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	95		75-128		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	94		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	77		49-107		
Batch number: 131575713007	Sample number(s): 7083686-7083687									
3b Mercury 7470A	0.00020	U	0.00020	0.00007 0	mg/l	98	95	90-115	3	20
Batch number: 131600637003	Sample number(s): 7083688,7083690-7083698									
Aluminum	40.0	U	40.0	7.71	mg/kg	102		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	102		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	105		80-120		
Calcium	6.15	J	20.0	4.02	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	100		80-120		
Iron	4.39	J	40.0	3.80	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	103		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	107		80-120		
Phosphorus	1.17	J	10.0	0.510	mg/kg	106		80-120		
Potassium	100 U		100.	13.5	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.43	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	104		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	104		80-120		
Batch number: 131600637003A	Sample number(s): 7083688,7083690-7083698									
Silver	0.200	U	0.200	0.0200	mg/kg	107		80-120		
Strontium	0.400	U	0.400	0.0340	mg/kg	106		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	98		80-120		
Batch number: 131600637003B	Sample number(s): 7083688,7083690-7083698									
Selenium	0.400	U	0.400	0.100	mg/kg	113		80-120		
Batch number: 131600638002	Sample number(s): 7083688,7083690-7083698									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	103		85-120		
Batch number: 131640635001	Sample number(s): 7083686-7083687									
Aluminum	0.400	U	0.400	0.0743	mg/l	99	101	90-112	2	20
Antimony	0.0400	U	0.0400	0.0035	mg/l	102	102	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	97	100	90-110	3	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	94	95	88-110	0	20
Boron	0.100	U	0.100	0.0083	mg/l	92	94	89-110	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cadmium	0.00045 J	0.0100	0.00036	mg/l	100	99	90-112	1	20
Calcium	0.400 U	0.400	0.0640	mg/l	98	100	90-110	2	20
Chromium	0.0300 U	0.0300	0.0011	mg/l	95	97	90-110	2	20
Cobalt	0.0100 U	0.0100	0.00066	mg/l	100	100	90-110	0	20
Copper	0.0200 U	0.0200	0.0021	mg/l	100	100	90-112	0	20
Iron	0.400 U	0.400	0.0333	mg/l	101	100	90-112	0	20
Lead	0.0300 U	0.0300	0.0051	mg/l	99	98	88-110	1	20
Lithium	0.0400 U	0.0400	0.0060	mg/l	99	100	90-110	1	20
Magnesium	0.200 U	0.200	0.0606	mg/l	98	98	90-110	0	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	99	98	90-110	1	20
Molybdenum	0.0200 U	0.0200	0.0029	mg/l	103	102	90-110	1	20
Nickel	0.0200 U	0.0200	0.0011	mg/l	102	101	90-111	1	20
Phosphorus	0.200 U	0.200	0.0052	mg/l	99	98	90-110	1	20
Potassium	1.00 U	1.00	0.145	mg/l	97	97	85-115	0	20
Sodium	2.00 U	2.00	0.167	mg/l	96	98	87-114	2	20
Tin	0.0400 U	0.0400	0.0022	mg/l	98	97	90-110	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	99	100	90-113	1	20
Vanadium	0.0100 U	0.0100	0.0013	mg/l	97	97	90-110	0	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	100	99	90-110	1	20
Zirconium	0.100 U	0.100	0.0092	mg/l	100	101	90-110	1	20
Batch number: 131640639001A	Sample number(s): 7083686-7083687								
Silver	0.0010 U	0.0010	0.00010	mg/l	102	99	90-115	2	20
Strontium	0.0020 U	0.0020	0.00022	mg/l	103	101	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	101	106	80-120	6	20
Batch number: 131640639001B	Sample number(s): 7083686-7083687								
Selenium	0.0040 U	0.0040	0.00050	mg/l	104	111	80-120	6	20
Batch number: 13157039401A	Sample number(s): 7083688,7083690-7083692								
15a pH by 9045D					99		95-105		
Batch number: 13157039401B	Sample number(s): 7083693-7083698								
15a pH by 9045D					99		95-105		
Batch number: 13158121521A	Sample number(s): 7083686-7083687								
28b. pH (9040B and 9040C)					99	99	90-110	0	3
Batch number: 13162162402A	Sample number(s): 7083688,7083690-7083698								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13163001	Sample number(s): 7083686-7083687								
2378-TCDD	2.00 U	2.00	0.325	pg/l	93		60-150		
12378-PeCDD	10.0 U	10.0	0.368	pg/l	99		60-150		
123478-HxCDD	0.615 J	10.0	0.218	pg/l	104		60-150		
123678-HxCDD	0.347 J	10.0	0.233	pg/l	101		60-150		
123789-HxCDD	0.422 J	10.0	0.236	pg/l	102		60-150		
1234678-HpCDD	0.980 J	10.0	0.274	pg/l	100		60-150		
OCDD	1.19 J	20.0	0.301	pg/l	101		60-150		
2378-TCDF	2.00 U	2.00	0.288	pg/l	98		60-150		
12378-PeCDF	0.764 J	10.0	0.204	pg/l	102		60-150		
23478-PeCDF	0.681 J	10.0	0.177	pg/l	102		60-150		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDF	0.641	J	10.0	0.106	pg/l	104		60-150		
123678-HxCDF	0.422	J	10.0	0.110	pg/l	103		60-150		
123789-HxCDF	0.484	J	10.0	0.111	pg/l	104		60-150		
234678-HxCDF	0.455	J	10.0	0.103	pg/l	103		60-150		
1234678-HpCDF	0.301	J	10.0	0.0907	pg/l	103		60-150		
1234789-HpCDF	0.419	J	10.0	0.108	pg/l	101		60-150		
OCDF	0.788	J	20.0	0.376	pg/l	100		60-150		
Batch number: 13163006	Sample number(s): 7083688,7083690-7083698									
2378-TCDD	0.0555	J	1.00	0.0213	ng/kg	95		67-158		
12378-PeCDD	0.0468	J	5.00	0.0192	ng/kg	100		70-142		
123478-HxCDD	0.0141	J	5.00	0.0121	ng/kg	106		70-164		
123678-HxCDD	0.0191	J	5.00	0.0132	ng/kg	105		76-134		
123789-HxCDD	0.0376	J	5.00	0.0129	ng/kg	105		64-162		
1234678-HpCDD	0.0612	J	5.00	0.0138	ng/kg	103		70-140		
OCDD	0.295	J	10.0	0.0136	ng/kg	103		78-144		
2378-TCDF	1.00	U	1.00	0.0154	ng/kg	104		75-158		
12378-PeCDF	0.0591	J	5.00	0.00970	ng/kg	103		80-134		
23478-PeCDF	0.0223	J	5.00	0.00940	ng/kg	105		68-160		
123478-HxCDF	0.0365	J	5.00	0.00700	ng/kg	108		72-134		
123678-HxCDF	0.0232	J	5.00	0.00670	ng/kg	104		84-130		
123789-HxCDF	0.0595	J	5.00	0.00810	ng/kg	106		78-130		
234678-HxCDF	0.0280	J	5.00	0.00660	ng/kg	106		70-156		
1234678-HpCDF	0.0525	J	5.00	0.00490	ng/kg	104		82-122		
1234789-HpCDF	0.0372	J	5.00	0.00750	ng/kg	104		78-138		
OCDF	0.0998	J	10.0	0.0166	ng/kg	104		63-170		
Batch number: 13163001	Sample number(s): 7083686-7083687									
TEQ WHO 2005 - EDLx0.0	0.0557				pg/l					
Batch number: 13163006	Sample number(s): 7083688,7083690-7083698									
TEQ WHO 2005 - EDLx0.0	0.0507				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13158SLB026	Sample number(s): 7083688,7083690-7083698 UNSPK: P081058								
Acenaphthene	106	109	48-127	3	30				
Acenaphthylene	88	92	49-121	5	30				
Anthracene	93	100	52-126	7	30				
Benzo(a)anthracene	108	123	32-135	12	30				
Benzo(a)pyrene	111	116	36-138	5	30				
Benzo(b)fluoranthene	143*	112	26-142	18	30				
Benzo(e)pyrene	161*	175*	70-130	9	30				
Benzo(g,h,i)perylene	59	61	33-141	3	30				

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Quality Control Summary

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Reported: 06/20/13 at 12:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(k)fluoranthene	136*	133*	47-129	2	30				
Butylbenzylphthalate	0*	0*	59-153	0	30				
Di-n-butylphthalate	0*	0*	62-154	0	30				
Chrysene	107	101	29-148	3	30				
Dibenz(a,h)anthracene	70	75	34-125	7	30				
Diethylphthalate	0*	0*	76-127	0	30				
Dimethylphthalate	0*	0*	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	99	98	47-135	1	30				
Fluorene	97	99	50-129	2	30				
Indeno(1,2,3-cd)pyrene	72	70	17-136	2	30				
1-Methylnaphthalene	92	95	50-131	4	30				
2-Methylnaphthalene	91	94	28-144	3	30				
Naphthalene	104	107	31-148	3	30				
N-Nitrosodimethylamine	163*	136*	48-113	18	30				
Di-n-octylphthalate	192*	181*	52-162	6	30				
Phenanthrene	95	96	29-142	0	30				
Pyrene	100	90	26-143	9	30				
Batch number: 13160A16A	Sample number(s): 7083691,7083694,7083697-7083698 UNSPK: P081064								
11a TPH by EPA 8015B GRO	103	101	39-118	7	30				
Batch number: 131620008A	Sample number(s): 7083690-7083691,7083696-7083698 UNSPK: P081064								
PCB-1016	47	66	16-146	33	50				
PCB-1260	42	53	40-134	23	50				
Batch number: 131630009A	Sample number(s): 7083688,7083690-7083698 UNSPK: 7083688								
EFH (C12-C14)	86	86	49-123	0	20				
EFH (C15-C20)	17*	24*	49-123	5	20				
EFH (C21-C30)	131*	145*	49-123	10	20				
EFH (C30-C40)	121	130*	49-123	7	20				
EFH (C8-C11)	73	73	49-123	1	20				
Batch number: 131600637003	Sample number(s): 7083688,7083690-7083698 UNSPK: P081064 BKG: P081064								
Aluminum	1690 (2)	1435 (2)	75-125	3	20	11,400	12,900	13	20
Antimony	77	78	75-125	1	20	3.85 U	3.85 U	0 (1)	20
Arsenic	106	104	75-125	2	20	3.64 J	4.46	20 (1)	20
Barium	108	103	75-125	3	20	81.5	97.6	18	20
Beryllium	105	104	75-125	1	20	0.444 J	0.527 J	17 (1)	20
Boron	102	102	75-125	0	20	1.73 J	1.31 J	27* (1)	20
Cadmium	99	98	75-125	1	20	0.342 J	0.338 J	1 (1)	20
Calcium	385 (2)	235 (2)	75-125	9	20	5,160	7,880	42*	20
Chromium	113	106	75-125	4	20	17.1	19.8	15	20
Cobalt	99	98	75-125	1	20	4.24	4.93	15 (1)	20
Copper	108	107	75-125	1	20	9.53 J	11.5	19 (1)	20
Iron	2592 (2)	918 (2)	75-125	7	20	20,400	23,100	12	20
Lead	102	96	75-125	4	20	5.26	6.05	14 (1)	20
Lithium	105	102	75-125	2	20	25.4	27.1	7	20
Magnesium	435 (2)	294 (2)	75-125	5	20	4,470	4,970	11	20
Manganese	164 (2)	142 (2)	75-125	3	20	259	275	6	20

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Quality Control Summary

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Reported: 06/20/13 at 12:10 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Molybdenum	98	98	75-125	0	20	0.718	J	0.362	J	66* (1)	20
Nickel	103	102	75-125	1	20	7.30		9.54		27* (1)	20
Phosphorus	156*	108	75-125	9	20	371		449		19	20
Potassium	138*	100	75-125	9	20	2,990		3,300		10	20
Sodium	102	100	75-125	2	20	114		127		10 (1)	20
Tin	92	92	75-125	0	20	2.85	J	2.85	J	0 (1)	20
Titanium	368 (2)	282 (2)	75-125	5	20	1,190		1,320		11	20
Vanadium	114	109	75-125	3	20	30.4		33.6		10	20
Zinc	107	99	75-125	4	20	54.8		61.1		11	20
Zirconium	102	101	75-125	1	20	4.81	U	1.05	J	200* (1)	20
Batch number: 131600637003A	Sample number(s): 7083688,7083690-7083698 UNSPK: P081064 BKG: P081064										
Silver	106	103	75-125	2	20	0.192	U	0.0203	J	200* (1)	20
Strontium	124	115	75-125	3	20	16.6		22.6		31*	20
Thallium	93	91	75-125	1	20	0.263		0.266		1 (1)	20
Batch number: 131600637003B	Sample number(s): 7083688,7083690-7083698 UNSPK: P081064 BKG: P081064										
Selenium	114	106	75-125	7	20	0.385	U	0.385	U	0 (1)	20
Batch number: 131600638002	Sample number(s): 7083688,7083690-7083698 UNSPK: P081058 BKG: P081058										
3a Mercury 7471A	102	100	65-135	3	20	0.0148	J	0.0141	J	5 (1)	20
Batch number: 13157039401A	Sample number(s): 7083688,7083690-7083692 BKG: P083615										
15a pH by 9045D						6.58		6.63		1	3
Batch number: 13157039401B	Sample number(s): 7083693-7083698 BKG: 7083693										
15a pH by 9045D						6.18		6.18		0	3
Batch number: 13162162402A	Sample number(s): 7083688,7083690-7083698 BKG: P085556										
14a Moisture Content by 160.3						2.8		2.7		1	20
Batch number: 13163006	Sample number(s): 7083688,7083690-7083698 UNSPK: P081064										
2378-TCDD	99	96	40-135	3	20						
12378-PeCDD	99	101	40-135	2	20						
123478-HxCDD	107	106	40-135	1	20						
123678-HxCDD	104	103	40-135	1	20						
123789-HxCDD	105	105	40-135	0	20						
1234678-HpCDD	104	102	40-135	2	20						
OCDD	103	102	40-135	1	20						
2378-TCDF	101	100	40-135	1	20						
12378-PeCDF	102	103	40-135	0	20						
23478-PeCDF	105	103	40-135	2	20						
123478-HxCDF	107	105	40-135	2	20						
123678-HxCDF	104	102	40-135	3	20						
123789-HxCDF	105	105	40-135	1	20						
234678-HxCDF	106	105	40-135	1	20						
1234678-HpCDF	106	105	40-135	1	20						
1234789-HpCDF	105	105	40-135	0	20						
OCDF	103	104	40-135	1	20						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13158SLB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7083688	88	91	95
7083690	77	79	83
7083691	85	87	91
7083692	87	86	96
7083693	86	89	89
7083694	85	91	90
7083695	80	78	93
7083696	81	74	90
7083697	80	72	91
7083698	78	80	88
Blank	86	89	96
LCS	90	94	97
MS	95	99	100
MSD	108	98	106
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13161WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7083686	94	87	104
7083687	95	88	105
Blank	100	86	100
LCS	98	105	111
LCSD	99	106	111
Limits:	64-120	62-141	58-134

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13160A16A

	Trifluorotoluene-F
7083691	87
7083694	81
7083697	78
7083698	75
Blank	87
LCS	93
MS	80
MSD	91
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Surrogate Quality Control

Batch number: 13164A20A

	Trifluorotoluene-F
7083686	86
7083687	87
7083689	87
Blank	85
LCS	126
LCSD	117
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131620008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7083690	108	106
7083691	112	110
7083696	94	84
7083697	99	81
7083698	106	106
Blank	113	122*
LCS	121*	124*
LCSD	118	127*
MS	58	53
MSD	76	68
Limits:	45-120	45-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 131630007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7083686	117	89
7083687	76	26*
Blank	102	55
LCS	97	38*
LCSD	110	90
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131610015A

	Chlorobenzene	Orthoterphenyl
7083686	92	90
7083687	92	78
Blank	83	81
LCS	88	96
LCSD	92	98
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131630009A

	Chlorobenzene	Orthoterphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Surrogate Quality Control

7083688	90	93
7083690	92	98
7083691	92	96
7083692	90	94
7083693	91	97
7083694	91	95
7083695	92	88
7083696	94	92
7083697	92	96
7083698	91	93
Blank	90	85
LCS	94	99
MS	88	92
MSD	88	92
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13163001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7083686	49	53	56	56	56	57
7083687	71	69	73	73	73	77
Blank	60	67	71	71	71	77
OPR	71	79	83	83	84	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7083686	53	51	47	49	51	54
7083687	67	59	53	64	69	67
Blank	69	66	65	62	67	67
OPR	82	74	72	75	77	78
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7083686	50	48	45	45	49
7083687	67	60	56	65	65
Blank	64	63	60	56	62
OPR	77	76	75	72	77
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13163006

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7083688	63	70	72	83	79	66
7083690	76	83	88	95	90	84
7083691	58	70	76	83	85	70
7083692	62	71	76	85	80	71
7083693	77	89	95	104	105	92

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395136
Reported: 06/20/13 at 12:10 PM

Surrogate Quality Control

7083694	72	80	89	97	101	88
7083695	81	87	93	93	93	92
7083696	77	80	87	87	88	90
7083697	62	71	78	85	84	73
7083698	61	69	77	84	80	77
Blank	69	79	85	93	88	84
MS	84	88	93	92	92	93
MSD	82	86	87	88	87	90
OPR	71	79	85	91	86	87
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7083688	102	63	61	72	77	76
7083690	109	76	75	82	85	83
7083691	104	67	65	69	76	80
7083692	109	64	61	71	75	76
7083693	122	87	85	87	96	95
7083694	117	78	73	80	92	93
7083695	94	91	103	84	85	85
7083696	88	84	85	77	77	82
7083697	109	66	62	72	78	80
7083698	102	72	71	69	74	76
Blank	110	81	84	81	84	86
MS	88	88	82	87	85	86
MSD	90	87	87	84	82	82
OPR	104	85	87	80	83	85
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7083688	74	75	78	57	75	
7083690	82	82	88	70	85	
7083691	75	74	79	56	72	
7083692	75	76	78	60	76	
7083693	93	94	96	74	91	
7083694	88	86	85	67	83	
7083695	83	90	96	84	85	
7083696	79	80	84	76	79	
7083697	77	78	77	59	75	
7083698	74	77	81	57	71	
Blank	84	87	92	63	81	
MS	86	81	72	83	88	
MSD	82	82	81	79	85	
OPR	83	86	92	63	79	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct #13013 Gp #1395136 Sample # 7083686-98

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013
CarrierName: FedEx
AirbillNo: 799931220808

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130605-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-060513	6/5/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-060513	6/5/13 15:00	WQ	None	2 - 250 mL Amber	10 day							X			X		X																			
EB1-060513	6/5/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB1-060513	6/5/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-060513	6/5/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB1-060513	6/5/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mysel	6/5/13	1600									
										6/6/13	0920

COC Rev 2

COC: 20130605-01, Page 1 of 1

acct# 13013 Cap# 1395136 Sample# 702 3636-98

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013
CarrierName: FedEx
AirbillNo: 799931220808

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130605-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-060513	6/5/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-060513	6/5/13 15:30	WQ	None	2 - 250 mL Amber	10 day							X			X																					
EB2-060513	6/5/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																						
EB2-060513	6/5/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	
EB2-060513	6/5/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB2-060513	6/5/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Sampson	06/07/13	1600									
										6/6/13	0920

1 of 1

COC # 13012 Cap # 139-5136 Sample # 70536486-98

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013
CarrierName: FedEx
AirbillNo: 799931220808

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130605-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-772-SA5A-SB-0.0-0.5	6/4/13 14:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-772-SA5A-SB-0.0-0.5	6/4/13 14:25	SO	None	1 - 4 oz glass	10 day													X																		
TB-060513	6/5/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-811-SA5A-SB-0.0-0.5	6/5/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-811-SA5A-SB-0.0-0.5	6/5/13 08:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X											X										
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	2 - Encore	10 day																			X												
SL-813-SA5A-SB-0.0-0.5	6/5/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-813-SA5A-SB-0.0-0.5	6/5/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-814-SA5A-SB-0.0-0.5	6/5/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-814-SA5A-SB-0.0-0.5	6/5/13 10:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X												X										
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	2 - Encore	10 day																			X												
SL-859-SA5A-SB-0.0-0.5	6/5/13 13:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-859-SA5A-SB-0.0-0.5	6/5/13 13:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-861-SA5A-SB-0.0-0.5	6/5/13 14:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-861-SA5A-SB-0.0-0.5	6/5/13 14:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-861-SA5A-SB-4.0-5.0	6/5/13 15:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-861-SA5A-SB-4.0-5.0	6/5/13 15:05	SO	None	2 - Encore	10 day																			X												
SL-861-SA5A-SB-7.0-8.0	6/5/13 15:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-861-SA5A-SB-7.0-8.0	6/5/13 15:15	SO	None	2 - Encore	10 day																			X												

Acct# 13013 Cap# 13015136 Sample# 703326-03

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013
CarrierName: FedEx
AirbillNo: 799931220808

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130605-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V Coutee

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie	06/05/13	1600									
									Stephanie	6/6/13	0920

2 of 2

13013 / 1395136 / 7083686-98

Natalie R. Luciano

From: Mysel, Stefanie [MyselSJ@cdmsmith.com]
Sent: Tuesday, June 18, 2013 12:00 PM
To: Natalie R. Luciano
Cc: Hartman, Pamela; Mysel, Stefanie; Burgesser, Todd; Zakowski, Cherie
Subject: SSFL Sample Name Correction

Attachments: Lancaster 060513.pdf



Lancaster
)60513.pdf (146 KB

Natalie,

Sample SL-859-SA5A-SB-0.0-0.5 sampled on 06/05/2013 at 13:50 (documented on COC 20130605-03) needs to be changed to SL-858-SA5A-SB-0.0-0.5. It will be the same sample date and time. Let me know if you have any questions. I attached a revised COC.

Regards,

Stefanie

Stefanie J. Mysel
Geologist

CDM Smith
100 Pringle Avenue
Suite 300
Walnut Creek, CA 94596

Main: 925-933-2900
Direct: 925-296-8081
Cell: 610-248-2430
Email: myselsj@cdmsmith.com<mailto:myselsj@cdmsmith.com>

1300 13/ 1395126/ 7083056-93

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013

CarrierName: FedEx

AirbillNo: 799931220808

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130605-03

Cooler #: 3

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-772-SA5A-SB-0.0-0.5	6/4/13 14:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X										X											
SL-772-SA5A-SB-0.0-0.5	6/4/13 14:25	SO	None	1 - 4 oz glass	10 day												X																		
TB-060513	6/5/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																		X												
SL-811-SA5A-SB-0.0-0.5	6/5/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X									X											
SL-811-SA5A-SB-0.0-0.5	6/5/13 08:45	SO	None	1 - 4 oz glass	10 day												X																		
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X									X											
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	1 - 4 oz glass	10 day												X																		
SL-811-SA5A-SB-5.5-6.5	6/5/13 09:00	SO	None	2 - Encore	10 day																		X												
SL-813-SA5A-SB-0.0-0.5	6/5/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X										X											
SL-813-SA5A-SB-0.0-0.5	6/5/13 09:45	SO	None	1 - 4 oz glass	10 day												X																		
SL-814-SA5A-SB-0.0-0.5	6/5/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X										X											
SL-814-SA5A-SB-0.0-0.5	6/5/13 10:25	SO	None	1 - 4 oz glass	10 day												X																		
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X										X											
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	1 - 4 oz glass	10 day												X																		
SL-814-SA5A-SB-4.0-5.0	6/5/13 10:40	SO	None	2 - Encore	10 day																		X												
SL-861-SA5A-SB-0.0-0.5	6/5/13 14:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X									X											
SL-861-SA5A-SB-0.0-0.5	6/5/13 14:20	SO	None	1 - 4 oz glass	10 day												X																		
SL-861-SA5A-SB-4.0-5.0	6/5/13 15:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X		X							X											
SL-861-SA5A-SB-4.0-5.0	6/5/13 15:05	SO	None	2 - Encore	10 day																		X												
SL-861-SA5A-SB-7.0-8.0	6/5/13 15:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X		X							X											
SL-861-SA5A-SB-7.0-8.0	6/5/13 15:15	SO	None	2 - Encore	10 day																		X												
SL-858-SA5A-SB-0.0-0.5	6/5/13 13:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X										X											
SL-858-SA5A-SB-0.0-0.5	6/5/13 13:50	SO	None	1 - 4 oz glass	10 day												X																		

Amended COC received 6/18/13 MK2 6/18/13

PSC13/134513c / 703306-19

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/5/2013
CarrierName: FedEx
AirbillNo: 799931220808

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130605-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Gordon

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Steve Mypelap	6/5/2013	1600									

Amended COC received 6/18/13 MK2 6/18/13

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Q#1395136

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 6/6/13

Time of Receipt: 0920

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.9	TB	WI	Y	B	
2	↓	1.4	↓	↓	↓	↓	DOE cooler
3	↓	0.5	↓	↓	↓	↓	
4	↓	1.3	↓	↓	↓	↓	
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: _____

Paperwork Discrepancy/Unpacking Problems:

_____

_____

_____

_____

_____

Unpacker Signature/Emp#: [signature] 9604 **Date/Time:** 6/6/13 1020

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 20, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/07/2013
Group Number: 1395501
SDG: PH050
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
TB-060613 Water	7085555
SL-871-SA5A-SB-0.0-0.5 Soil	7085556
SL-871-SA5A-SB-0.0-0.5MS Soil	7085557
SL-871-SA5A-SB-0.0-0.5MSD Soil	7085558
SL-871-SA5A-SB-0.0-0.5DUP Soil	7085559
SL-1271-SA5A-SB-0.0-0.5 Soil	7085560
SL-872-SA5A-SB-0.0-0.5 Soil	7085561
SL-872-SA5A-SB-2.5-3.5 Soil	7085562
SL-873-SA5A-SB-0.0-0.5 Soil	7085563
SL-862-SA5A-SB-0.0-0.5 Soil	7085564
SL-862-SA5A-SB-4.5-5.5 Soil	7085565

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

eurofins | Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-060613 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7085555
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 08:00

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB606 SDG#: PH050-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13164C20A	06/14/2013 22:12	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13164C20A	06/14/2013 22:12	Marie D John	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	46		18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	7.2		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	15		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		40.0	7.70	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.499	1
06935	Arsenic	7440-38-2	5.07		4.00	0.330	1
06946	Barium	7440-39-3	108		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.644	J	0.999	0.0669	1
07914	Boron	7440-42-8	4.78	J	9.99	0.829	1
06949	Cadmium	7440-43-9	0.999	U	0.999	0.0330	1
01650	Calcium	7440-70-2	2,490		20.0	4.02	1
06951	Chromium	7440-47-3	22.7		3.00	0.0879	1
06952	Cobalt	7440-48-4	5.64		0.999	0.0899	1
06953	Copper	7440-50-8	11.9		2.00	0.180	1
01654	Iron	7439-89-6	19,500		40.0	3.80	1
06955	Lead	7439-92-1	8.56		3.00	0.469	1
01656	Lithium	7439-93-2	23.8		4.0	0.55	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,520		9.99	1.73	1
06958	Manganese	7439-96-5	330		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.707	J	2.00	0.170	1
06961	Nickel	7440-02-0	15.2		2.00	0.110	1
10145	Phosphorus	7723-14-0	441		9.99	0.509	1
01662	Potassium	7440-09-7	4,040		99.9	13.5	1
01667	Sodium	7440-23-5	71.7	J	99.9	16.7	1
06969	Tin	7440-31-5	2.83	J	9.99	0.220	1
06970	Titanium	7440-32-6	1,210		0.999	0.170	1
06971	Vanadium	7440-62-2	38.3		0.999	0.110	1
06972	Zinc	7440-66-6	64.4		4.00	0.200	1
10146	Zirconium	7440-67-7	2.94	J	4.99	0.829	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.152	J	0.400	0.0999	2
06142	Silver	7440-22-4	0.0441	J	0.200	0.0200	2
06144	Strontium	7440-24-6	23.5		0.400	0.0340	2
06145	Thallium	7440-28-0	0.308		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.45		0.0100	0.0100	1
	The pH was measured in water at 21.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0214	1
11031	12378-PeCDD	40321-76-4	0.122	JB	5.09	0.0293	1
11031	123478-HxCDD	39227-28-6	0.0394	JQ	5.09	0.0233	1
11031	123678-HxCDD	57653-85-7	0.259	JBQ	5.09	0.0244	1
11031	123789-HxCDD	19408-74-3	0.310	JBQ	5.09	0.0250	1
11031	1234678-HpCDD	35822-46-9	1.67	JB	5.09	0.0266	1
11031	OCDD	3268-87-9	19.8	B	10.2	0.0218	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0191	1
11031	12378-PeCDF	57117-41-6	0.109	JBQ	5.09	0.0139	1
11031	23478-PeCDF	57117-31-4	0.0537	JBQ	5.09	0.0133	1
11031	123478-HxCDF	70648-26-9	0.0619	JB	5.09	0.0124	1
11031	123678-HxCDF	57117-44-9	0.0582	JB	5.09	0.0124	1
11031	123789-HxCDF	72918-21-9	0.317	JB	5.09	0.0146	1
11031	234678-HxCDF	60851-34-5	0.0689	JBQ	5.09	0.0113	1
11031	1234678-HpCDF	67562-39-4	0.466	JB	5.09	0.0115	1
11031	1234789-HpCDF	55673-89-7	0.0863	JB	5.09	0.0167	1
11031	OCDF	39001-02-0	1.54	JB	10.2	0.0221	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.194				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 10:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 09:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/18/2013 14:37	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 02:34	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:20	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:20	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:25	Damary Valentin	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085556
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085557
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	28		1.7	0.68	1
12969	Acenaphthylene	208-96-8	29		1.7	0.34	1
12969	Anthracene	120-12-7	29		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	29		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	26		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	33		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	26		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	22		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	26		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	32		18	6.2	1
12969	Di-n-butylphthalate	84-74-2	35		18	6.2	1
12969	Chrysene	218-01-9	28		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	23		1.7	0.68	1
12969	Diethylphthalate	84-66-2	21		18	6.2	1
12969	Dimethylphthalate	131-11-3	28		18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37		18	6.2	1
12969	Fluoranthene	206-44-0	31		1.7	0.68	1
12969	Fluorene	86-73-7	27		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	23		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	31		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	31		1.7	0.68	1
12969	Naphthalene	91-20-3	29		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	120		18	6.2	1
12969	Phenanthrene	85-01-8	30		1.7	0.68	1
12969	Pyrene	129-00-0	27		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	3.3	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	8.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,100		40.0	7.70	1
06944	Antimony	7440-36-0	30.3		4.00	0.499	1
06935	Arsenic	7440-38-2	19.8		4.00	0.330	1
06946	Barium	7440-39-3	312		0.999	0.0330	1
06947	Beryllium	7440-41-7	5.65		0.999	0.0669	1
07914	Boron	7440-42-8	196		9.99	0.829	1
06949	Cadmium	7440-43-9	4.81		0.999	0.0330	1
01650	Calcium	7440-70-2	3,020		20.0	4.02	1
06951	Chromium	7440-47-3	45.2		3.00	0.0879	1
06952	Cobalt	7440-48-4	53.2		0.999	0.0899	1
06953	Copper	7440-50-8	36.8		2.00	0.180	1
01654	Iron	7439-89-6	20,300		40.0	3.80	1
06955	Lead	7439-92-1	23.1		3.00	0.469	1
01656	Lithium	7439-93-2	129		4.0	0.55	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085557
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,950	9.99	1.73	1
06958	Manganese	7439-96-5	388	0.999	0.0829	1
06960	Molybdenum	7439-98-7	191	2.00	0.170	1
06961	Nickel	7440-02-0	63.8	2.00	0.110	1
10145	Phosphorus	7723-14-0	538	9.99	0.509	1
01662	Potassium	7440-09-7	5,390	99.9	13.5	1
01667	Sodium	7440-23-5	1,040	99.9	16.7	1
06969	Tin	7440-31-5	364	9.99	0.220	1
06970	Titanium	7440-32-6	1,530	0.999	0.170	1
06971	Vanadium	7440-62-2	91.3	0.999	0.110	1
06972	Zinc	7440-66-6	115	4.00	0.200	1
10146	Zirconium	7440-67-7	94.6	4.99	0.829	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.37	0.400	0.0999	2
06142	Silver	7440-22-4	11.2	0.200	0.0200	2
06144	Strontium	7440-24-6	33.1	0.400	0.0340	2
06145	Thallium	7440-28-0	0.858	0.200	0.0300	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.171	0.0170	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.8	0.10	0.10	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085557
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.9		1.03	0.0360	1
11031	12378-PeCDD	40321-76-4	103	B	5.13	0.0428	1
11031	123478-HxCDD	39227-28-6	110		5.13	0.0389	1
11031	123678-HxCDD	57653-85-7	108	B	5.13	0.0418	1
11031	123789-HxCDD	19408-74-3	109	B	5.13	0.0398	1
11031	1234678-HpCDD	35822-46-9	123	B	5.13	0.0469	1
11031	OCDD	3268-87-9	445	B	10.3	0.0419	1
11031	2378-TCDF	51207-31-9	21.4		1.03	0.0470	1
11031	12378-PeCDF	57117-41-6	109	B	5.13	0.0347	1
11031	23478-PeCDF	57117-31-4	108	B	5.13	0.0357	1
11031	123478-HxCDF	70648-26-9	111	B	5.13	0.0407	1
11031	123678-HxCDF	57117-44-9	109	B	5.13	0.0373	1
11031	123789-HxCDF	72918-21-9	111	B	5.13	0.0456	1
11031	234678-HxCDF	60851-34-5	110	B	5.13	0.0366	1
11031	1234678-HpCDF	67562-39-4	113	B	5.13	0.0243	1
11031	1234789-HpCDF	55673-89-7	109	B	5.13	0.0448	1
11031	OCDF	39001-02-0	236	B	10.3	0.0421	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085557
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 10:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 10:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/18/2013 15:34	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 02:45	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:27	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:31	Damary Valentin	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085557
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085558
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	30		1.7	0.68	1
12969	Acenaphthylene	208-96-8	31		1.7	0.34	1
12969	Anthracene	120-12-7	31		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	31		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	29		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	34		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	29		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	23		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	30		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	34		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	35		18	6.1	1
12969	Chrysene	218-01-9	30		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	24		1.7	0.68	1
12969	Diethylphthalate	84-66-2	27		18	6.1	1
12969	Dimethylphthalate	131-11-3	28		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.1	1
12969	Fluoranthene	206-44-0	34		1.7	0.68	1
12969	Fluorene	86-73-7	31		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	33		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.68	1
12969	Naphthalene	91-20-3	31		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	42		18	6.1	1
12969	Phenanthrene	85-01-8	32		1.7	0.68	1
12969	Pyrene	129-00-0	30		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	4.4	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	15		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	29		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,700		40.0	7.70	1
06944	Antimony	7440-36-0	30.5		4.00	0.499	1
06935	Arsenic	7440-38-2	19.7		4.00	0.330	1
06946	Barium	7440-39-3	308		0.999	0.0330	1
06947	Beryllium	7440-41-7	5.63		0.999	0.0669	1
07914	Boron	7440-42-8	196		9.99	0.829	1
06949	Cadmium	7440-43-9	4.76		0.999	0.0330	1
01650	Calcium	7440-70-2	2,960		20.0	4.02	1
06951	Chromium	7440-47-3	44.1		3.00	0.0879	1
06952	Cobalt	7440-48-4	52.8		0.999	0.0899	1
06953	Copper	7440-50-8	36.8		2.00	0.180	1
01654	Iron	7439-89-6	19,300		40.0	3.80	1
06955	Lead	7439-92-1	22.8		3.00	0.469	1
01656	Lithium	7439-93-2	127		4.0	0.55	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085558
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
01657	Magnesium	7439-95-4	4,810	9.99	1.73	1
06958	Manganese	7439-96-5	370	0.999	0.0829	1
06960	Molybdenum	7439-98-7	190	2.00	0.170	1
06961	Nickel	7440-02-0	63.5	2.00	0.110	1
10145	Phosphorus	7723-14-0	513	9.99	0.509	1
01662	Potassium	7440-09-7	5,300	99.9	13.5	1
01667	Sodium	7440-23-5	1,040	99.9	16.7	1
06969	Tin	7440-31-5	363	9.99	0.220	1
06970	Titanium	7440-32-6	1,490	0.999	0.170	1
06971	Vanadium	7440-62-2	89.1	0.999	0.110	1
06972	Zinc	7440-66-6	113	4.00	0.200	1
10146	Zirconium	7440-67-7	93.5	4.99	0.829	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.49	0.400	0.0999	2
06142	Silver	7440-22-4	12.2	0.200	0.0200	2
06144	Strontium	7440-24-6	35.7	0.400	0.0340	2
06145	Thallium	7440-28-0	0.855	0.200	0.0300	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.165	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.8	0.10	0.10	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085558
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.5		0.994	0.0379	1
11031	12378-PeCDD	40321-76-4	99.6	B	4.97	0.0437	1
11031	123478-HxCDD	39227-28-6	107		4.97	0.0428	1
11031	123678-HxCDD	57653-85-7	105	B	4.97	0.0454	1
11031	123789-HxCDD	19408-74-3	105	B	4.97	0.0422	1
11031	1234678-HpCDD	35822-46-9	121	B	4.97	0.0524	1
11031	OCDD	3268-87-9	458	B	9.94	0.0404	1
11031	2378-TCDF	51207-31-9	20.5		0.994	0.0401	1
11031	12378-PeCDF	57117-41-6	106	B	4.97	0.0371	1
11031	23478-PeCDF	57117-31-4	107	B	4.97	0.0347	1
11031	123478-HxCDF	70648-26-9	107	B	4.97	0.0368	1
11031	123678-HxCDF	57117-44-9	106	B	4.97	0.0352	1
11031	123789-HxCDF	72918-21-9	108	B	4.97	0.0435	1
11031	234678-HxCDF	60851-34-5	107	B	4.97	0.0327	1
11031	1234678-HpCDF	67562-39-4	111	B	4.97	0.0311	1
11031	1234789-HpCDF	55673-89-7	106	B	4.97	0.0420	1
11031	OCDF	39001-02-0	228	B	9.94	0.0384	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085558
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 11:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 10:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/18/2013 16:31	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 02:49	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:29	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:29	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:33	Damary Valentin	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085558
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-871-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085559
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.0	7.70	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.499	1
06935	Arsenic	7440-38-2	5.42		4.00	0.330	1
06946	Barium	7440-39-3	109		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.642	J	0.999	0.0669	1
07914	Boron	7440-42-8	3.92	J	9.99	0.829	1
06949	Cadmium	7440-43-9	0.999	U	0.999	0.0330	1
01650	Calcium	7440-70-2	2,370		20.0	4.02	1
06951	Chromium	7440-47-3	23.0		3.00	0.0879	1
06952	Cobalt	7440-48-4	6.03		0.999	0.0899	1
06953	Copper	7440-50-8	11.9		2.00	0.180	1
01654	Iron	7439-89-6	19,800		40.0	3.80	1
06955	Lead	7439-92-1	8.81		3.00	0.469	1
01656	Lithium	7439-93-2	23.8		4.0	0.55	1
01657	Magnesium	7439-95-4	4,520		9.99	1.73	1
06958	Manganese	7439-96-5	343		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.514	J	2.00	0.170	1
06961	Nickel	7440-02-0	15.3		2.00	0.110	1
10145	Phosphorus	7723-14-0	427		9.99	0.509	1
01662	Potassium	7440-09-7	4,030		99.9	13.5	1
01667	Sodium	7440-23-5	70.3	J	99.9	16.7	1
06969	Tin	7440-31-5	2.83	J	9.99	0.220	1
06970	Titanium	7440-32-6	1,170		0.999	0.170	1
06971	Vanadium	7440-62-2	38.6		0.999	0.110	1
06972	Zinc	7440-66-6	64.1		4.00	0.200	1
10146	Zirconium	7440-67-7	3.55	J	4.99	0.829	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.237	J	0.400	0.0999	2
06142	Silver	7440-22-4	0.0967	J	0.200	0.0200	2
06144	Strontium	7440-24-6	31.1		0.400	0.0340	2
06145	Thallium	7440-28-0	0.409		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.42		0.0100	0.0100	1
	The pH was measured in water at 21.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-871-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085559
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:30 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

871-0 SDG#: PH050-02DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 02:41	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:24	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:24	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:24	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:24	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.71	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.80	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	0.81	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	100		18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	6.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,700		40.1	7.73	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.502	1
06935	Arsenic	7440-38-2	5.15		4.01	0.331	1
06946	Barium	7440-39-3	104		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.647	J	1.00	0.0672	1
07914	Boron	7440-42-8	3.27	J	10.0	0.833	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0331	1
01650	Calcium	7440-70-2	2,080		20.1	4.03	1
06951	Chromium	7440-47-3	21.9		3.01	0.0883	1
06952	Cobalt	7440-48-4	5.56		1.00	0.0903	1
06953	Copper	7440-50-8	11.8		2.01	0.181	1
01654	Iron	7439-89-6	19,300		40.1	3.81	1
06955	Lead	7439-92-1	5.19		3.01	0.471	1
01656	Lithium	7439-93-2	23.9		4.0	0.55	1

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,410		10.0	1.74	1
06958	Manganese	7439-96-5	315		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.472	J	2.01	0.171	1
06961	Nickel	7440-02-0	14.6		2.01	0.110	1
10145	Phosphorus	7723-14-0	366		10.0	0.512	1
01662	Potassium	7440-09-7	3,590		100	13.5	1
01667	Sodium	7440-23-5	71.2	J	100	16.8	1
06969	Tin	7440-31-5	2.74	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,140		1.00	0.171	1
06971	Vanadium	7440-62-2	37.6		1.00	0.110	1
06972	Zinc	7440-66-6	59.2		4.01	0.201	1
10146	Zirconium	7440-67-7	2.93	J	5.02	0.833	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.140	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0470	J	0.201	0.0201	2
06144	Strontium	7440-24-6	19.7		0.401	0.0341	2
06145	Thallium	7440-28-0	0.290		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	U	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.62		0.0100	0.0100	1
	The pH was measured in water at 21.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0257	1
11031	12378-PeCDD	40321-76-4	0.138	JBQ	5.00	0.0385	1
11031	123478-HxCDD	39227-28-6	0.150	JQ	5.00	0.0329	1
11031	123678-HxCDD	57653-85-7	0.420	JB	5.00	0.0353	1
11031	123789-HxCDD	19408-74-3	0.523	JB	5.00	0.0332	1
11031	1234678-HpCDD	35822-46-9	7.78	B	5.00	0.0345	1
11031	OCDD	3268-87-9	109	B	10.0	0.0282	1
11031	2378-TCDF	51207-31-9	0.0807	J	1.00	0.0299	1
11031	12378-PeCDF	57117-41-6	0.171	JB	5.00	0.0217	1
11031	23478-PeCDF	57117-31-4	0.128	JB	5.00	0.0195	1
11031	123478-HxCDF	70648-26-9	0.114	JBQ	5.00	0.0240	1
11031	123678-HxCDF	57117-44-9	0.241	JB	5.00	0.0221	1
11031	123789-HxCDF	72918-21-9	0.312	JB	5.00	0.0253	1
11031	234678-HxCDF	60851-34-5	0.150	JB	5.00	0.0224	1
11031	1234678-HpCDF	67562-39-4	2.22	JB	5.00	0.0181	1
11031	1234789-HpCDF	55673-89-7	0.186	JB	5.00	0.0276	1
11031	OCDF	39001-02-0	7.71	JB	10.0	0.0298	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.353				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 12:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 11:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/19/2013 20:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:01	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:35	Damary Valentin	1

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

Sample Description: SL-1271-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085560
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 10:45 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

12710 SDG#: PH050-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.2	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	31		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		40.0	7.72	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.500	1
06935	Arsenic	7440-38-2	5.66		4.00	0.330	1
06946	Barium	7440-39-3	109		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.675	J	1.00	0.0671	1
07914	Boron	7440-42-8	4.82	J	10.0	0.831	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0330	1
01650	Calcium	7440-70-2	2,950		20.0	4.02	1
06951	Chromium	7440-47-3	24.5		3.00	0.0881	1
06952	Cobalt	7440-48-4	5.60		1.00	0.0901	1
06953	Copper	7440-50-8	12.4		2.00	0.180	1
01654	Iron	7439-89-6	19,600		40.0	3.80	1
06955	Lead	7439-92-1	8.82		3.00	0.470	1
01656	Lithium	7439-93-2	23.7		4.0	0.55	1

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,400		10.0	1.73	1
06958	Manganese	7439-96-5	316		1.00	0.0831	1
06960	Molybdenum	7439-98-7	0.525	J	2.00	0.170	1
06961	Nickel	7440-02-0	15.5		2.00	0.110	1
10145	Phosphorus	7723-14-0	386		10.0	0.510	1
01662	Potassium	7440-09-7	4,020		100	13.5	1
01667	Sodium	7440-23-5	70.7	J	100	16.7	1
06969	Tin	7440-31-5	2.88	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,190		1.00	0.170	1
06971	Vanadium	7440-62-2	39.1		1.00	0.110	1
06972	Zinc	7440-66-6	60.3		4.00	0.200	1
10146	Zirconium	7440-67-7	2.80	J	5.00	0.831	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.213	J	0.400	0.100	2
06142	Silver	7440-22-4	0.0781	J	0.200	0.0200	2
06144	Strontium	7440-24-6	35.9		0.400	0.0340	2
06145	Thallium	7440-28-0	0.395		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.67		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0305 JQ	1.02	0.0207	1
11031	12378-PeCDD	40321-76-4	0.0626 JBQ	5.09	0.0225	1
11031	123478-HxCDD	39227-28-6	0.0270 JQ	5.09	0.0146	1
11031	123678-HxCDD	57653-85-7	0.116 JBQ	5.09	0.0157	1
11031	123789-HxCDD	19408-74-3	0.202 JB	5.09	0.0163	1
11031	1234678-HpCDD	35822-46-9	0.108 JBQ	5.09	0.0154	1
11031	OCDD	3268-87-9	1.31 JB	10.2	0.0225	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0185	1
11031	12378-PeCDF	57117-41-6	0.145 JBQ	5.09	0.0189	1
11031	23478-PeCDF	57117-31-4	0.125 JBQ	5.09	0.0177	1
11031	123478-HxCDF	70648-26-9	0.0505 JBQ	5.09	0.0125	1
11031	123678-HxCDF	57117-44-9	0.0496 JBQ	5.09	0.0118	1
11031	123789-HxCDF	72918-21-9	0.295 JB	5.09	0.0155	1
11031	234678-HxCDF	60851-34-5	0.0403 JBQ	5.09	0.0112	1
11031	1234678-HpCDF	67562-39-4	0.0572 JB	5.09	0.00629	1
11031	1234789-HpCDF	55673-89-7	0.0635 JB	5.09	0.0108	1
11031	OCDF	39001-02-0	0.119 JBQ	10.2	0.0233	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0513			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 13:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 11:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/18/2013 18:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:13	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:44	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:44	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:44	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:44	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:37	Damary Valentin	1

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

Sample Description: SL-872-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085561
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 12:55 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-0 SDG#: PH050-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	0.84	J	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.61
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	6.2		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	16		11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,500		41.2	7.94	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.515	1
06935	Arsenic	7440-38-2	7.19		4.12	0.340	1
06946	Barium	7440-39-3	87.7		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.860	J	1.03	0.0690	1
07914	Boron	7440-42-8	4.78	J	10.3	0.855	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0340	1
01650	Calcium	7440-70-2	2,380		20.6	4.14	1
06951	Chromium	7440-47-3	26.9		3.09	0.0906	1

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.30		1.03	0.0927	1
06953	Copper	7440-50-8	9.94		2.06	0.185	1
01654	Iron	7439-89-6	22,500		41.2	3.91	1
06955	Lead	7439-92-1	6.52		3.09	0.484	1
01656	Lithium	7439-93-2	30.6		4.1	0.57	1
01657	Magnesium	7439-95-4	4,970		10.3	1.78	1
06958	Manganese	7439-96-5	301		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.528	J	2.06	0.175	1
06961	Nickel	7440-02-0	16.2		2.06	0.113	1
10145	Phosphorus	7723-14-0	216		10.3	0.525	1
01662	Potassium	7440-09-7	2,340		103	13.9	1
01667	Sodium	7440-23-5	110		103	17.2	1
06969	Tin	7440-31-5	3.05	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,230		1.03	0.175	1
06971	Vanadium	7440-62-2	47.3		1.03	0.113	1
06972	Zinc	7440-66-6	54.1		4.12	0.206	1
10146	Zirconium	7440-67-7	3.98	J	5.15	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.207	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0593	J	0.206	0.0206	2
06144	Strontium	7440-24-6	27.6		0.412	0.0350	2
06145	Thallium	7440-28-0	0.371		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.29		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0345 J	1.03	0.0200	1
11031	12378-PeCDD	40321-76-4	0.105 JBQ	5.16	0.0217	1
11031	123478-HxCDD	39227-28-6	0.0838 JQ	5.16	0.0166	1
11031	123678-HxCDD	57653-85-7	0.0848 JBQ	5.16	0.0175	1
11031	123789-HxCDD	19408-74-3	0.135 JBQ	5.16	0.0169	1
11031	1234678-HpCDD	35822-46-9	0.0826 JBQ	5.16	0.0128	1
11031	OCDD	3268-87-9	0.584 JB	10.3	0.0224	1
11031	2378-TCDF	51207-31-9	0.0446 JQ	1.03	0.0148	1
11031	12378-PeCDF	57117-41-6	0.227 JBQ	5.16	0.0163	1
11031	23478-PeCDF	57117-31-4	0.149 JB	5.16	0.0150	1
11031	123478-HxCDF	70648-26-9	0.107 JBQ	5.16	0.0122	1
11031	123678-HxCDF	57117-44-9	0.122 JBQ	5.16	0.0121	1
11031	123789-HxCDF	72918-21-9	0.128 JBQ	5.16	0.0135	1
11031	234678-HxCDF	60851-34-5	0.0757 JB	5.16	0.0107	1
11031	1234678-HpCDF	67562-39-4	0.0757 JB	5.16	0.00573	1
11031	1234789-HpCDF	55673-89-7	0.0228 JBQ	5.16	0.00838	1
11031	OCDF	39001-02-0	0.130 JB	10.3	0.0217	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0876			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	91	32 - 141
13C12-123678-HxCDD	91	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	95	26 - 152
13C12-123678-HxCDF	99	26 - 123
13C12-234678-HxCDF	103	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 13:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/10/2013 01:33	Laura M Krieger	25.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315831343	06/07/2013 14:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315831343	06/07/2013 14:32	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 11:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/18/2013 19:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:17	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:46	Choon Y Tian	2

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

Sample Description: SL-872-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085562
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 13:20 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

872-2 SDG#: PH050-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	7.5	J	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	6.1		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	10	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,900		43.9	8.45	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.548	1
06935	Arsenic	7440-38-2	5.86		4.39	0.362	1
06946	Barium	7440-39-3	94.5		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.821	J	1.10	0.0735	1
07914	Boron	7440-42-8	15.2		11.0	0.910	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0362	1
01650	Calcium	7440-70-2	2,210		21.9	4.41	1
06951	Chromium	7440-47-3	28.8		3.29	0.0965	1
06952	Cobalt	7440-48-4	3.32		1.10	0.0987	1
06953	Copper	7440-50-8	7.92		2.19	0.197	1
01654	Iron	7439-89-6	23,300		43.9	4.17	1
06955	Lead	7439-92-1	6.31		3.29	0.515	1
01656	Lithium	7439-93-2	25.8		4.4	0.60	1

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,950		11.0	1.90	1
06958	Manganese	7439-96-5	139		1.10	0.0910	1
06960	Molybdenum	7439-98-7	0.579	J	2.19	0.186	1
06961	Nickel	7440-02-0	12.2		2.19	0.121	1
10145	Phosphorus	7723-14-0	150		11.0	0.559	1
01662	Potassium	7440-09-7	1,440		110	14.8	1
01667	Sodium	7440-23-5	153		110	18.3	1
06969	Tin	7440-31-5	3.30	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,120		1.10	0.186	1
06971	Vanadium	7440-62-2	47.0		1.10	0.121	1
06972	Zinc	7440-66-6	37.8		4.39	0.219	1
10146	Zirconium	7440-67-7	4.62	J	5.48	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.478		0.439	0.110	2
06142	Silver	7440-22-4	0.0523	J	0.219	0.0219	2
06144	Strontium	7440-24-6	21.9		0.439	0.0373	2
06145	Thallium	7440-28-0	0.248		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0150	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.23		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0719 JBQ	1.09	0.0342	1
11031	12378-PeCDD	40321-76-4	0.0949 JBQ	5.43	0.0427	1
11031	123478-HxCDD	39227-28-6	0.0360 JBQ	5.43	0.0282	1
11031	123678-HxCDD	57653-85-7	0.296 JB	5.43	0.0295	1
11031	123789-HxCDD	19408-74-3	0.508 JB	5.43	0.0282	1
11031	1234678-HpCDD	35822-46-9	0.401 JB	5.43	0.0265	1
11031	OCDD	3268-87-9	5.94 JB	10.9	0.0310	1
11031	2378-TCDF	51207-31-9	0.0308 JBQ	1.09	0.0275	1
11031	12378-PeCDF	57117-41-6	5.43 U	5.43	0.0226	1
11031	23478-PeCDF	57117-31-4	0.0430 JBQ	5.43	0.0227	1
11031	123478-HxCDF	70648-26-9	0.0348 JBQ	5.43	0.0130	1
11031	123678-HxCDF	57117-44-9	0.142 JBQ	5.43	0.0117	1
11031	123789-HxCDF	72918-21-9	0.109 JB	5.43	0.0159	1
11031	234678-HxCDF	60851-34-5	0.0367 JBQ	5.43	0.0126	1
11031	1234678-HpCDF	67562-39-4	0.139 JB	5.43	0.00941	1
11031	1234789-HpCDF	55673-89-7	0.0309 JBQ	5.43	0.0156	1
11031	OCDF	39001-02-0	0.552 JBQ	10.9	0.0329	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0984			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 14:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 12:21	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 03:43	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:21	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:49	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:41	Damary Valentin	1

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

Sample Description: SL-873-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085563
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 14:15 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

873-0 SDG#: PH050-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.7	10
12969	Acenaphthylene	208-96-8	17	U	17	3.3	10
12969	Anthracene	120-12-7	17	U	17	3.3	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.7	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.7	10
12969	Benzo(b)fluoranthene	205-99-2	12	J	17	6.7	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	33	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.7	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.7	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	60	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	60	10
12969	Chrysene	218-01-9	13	J	17	3.3	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.7	10
12969	Diethylphthalate	84-66-2	180	U	180	60	10
12969	Dimethylphthalate	131-11-3	180	U	180	60	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	60	10
12969	Fluoranthene	206-44-0	12	J	17	6.7	10
12969	Fluorene	86-73-7	17	U	17	6.7	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.7	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.7	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.7	10
12969	Naphthalene	91-20-3	17	U	17	6.7	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.7	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	60	10
12969	Phenanthrene	85-01-8	17	U	17	6.7	10
12969	Pyrene	129-00-0	11	J	17	6.7	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	25	U	25	10	5
12952	EFH (C15-C20)	n.a.	25	U	25	10	5
12952	EFH (C21-C30)	n.a.	37		25	10	5
12952	EFH (C30-C40)	n.a.	130		51	20	5
12952	EFH (C8-C11)	n.a.	25	U	25	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		40.6	7.82	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.507	1
06935	Arsenic	7440-38-2	5.58		4.06	0.335	1
06946	Barium	7440-39-3	98.1		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.647	J	1.01	0.0680	1
07914	Boron	7440-42-8	3.23	J	10.1	0.842	1
06949	Cadmium	7440-43-9	0.0365	J	1.01	0.0335	1
01650	Calcium	7440-70-2	3,130		20.3	4.08	1
06951	Chromium	7440-47-3	22.3		3.04	0.0892	1
06952	Cobalt	7440-48-4	5.88		1.01	0.0913	1
06953	Copper	7440-50-8	13.5		2.03	0.183	1
01654	Iron	7439-89-6	19,800		40.6	3.85	1
06955	Lead	7439-92-1	33.1		3.04	0.477	1

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	23.0		4.1	0.56	1
01657	Magnesium	7439-95-4	4,390		10.1	1.75	1
06958	Manganese	7439-96-5	308		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.424	J	2.03	0.172	1
06961	Nickel	7440-02-0	13.9		2.03	0.112	1
10145	Phosphorus	7723-14-0	467		10.1	0.517	1
01662	Potassium	7440-09-7	3,400		101	13.7	1
01667	Sodium	7440-23-5	70.4	J	101	16.9	1
06969	Tin	7440-31-5	3.07	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,140		1.01	0.172	1
06971	Vanadium	7440-62-2	41.4		1.01	0.112	1
06972	Zinc	7440-66-6	86.4		4.06	0.203	1
10146	Zirconium	7440-67-7	2.70	J	5.07	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.210	J	0.406	0.101	2
06142	Silver	7440-22-4	0.113	J	0.203	0.0203	2
06144	Strontium	7440-24-6	25.3		0.406	0.0345	2
06145	Thallium	7440-28-0	0.385		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0211		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.95		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.261	JBQ	0.991	0.0499	1
11031	12378-PeCDD	40321-76-4	1.35	JB	4.96	0.0832	1
11031	123478-HxCDD	39227-28-6	2.24	JB	4.96	0.0474	1
11031	123678-HxCDD	57653-85-7	5.36	B	4.96	0.0489	1
11031	123789-HxCDD	19408-74-3	4.99	B	4.96	0.0468	1
11031	1234678-HpCDD	35822-46-9	132	B	4.96	0.0670	1
11031	OCDD	3268-87-9	2,060	B	9.91	0.0457	1
11031	2378-TCDF	51207-31-9	0.948	JB	0.991	0.0869	1
11031	12378-PeCDF	57117-41-6	1.25	JB	4.96	0.0453	1
11031	23478-PeCDF	57117-31-4	0.937	JBQ	4.96	0.0426	1
11031	123478-HxCDF	70648-26-9	1.03	JB	4.96	0.0353	1
11031	123678-HxCDF	57117-44-9	0.868	JB	4.96	0.0356	1
11031	123789-HxCDF	72918-21-9	4.96	U	4.96	0.0385	1
11031	234678-HxCDF	60851-34-5	0.934	JB	4.96	0.0343	1
11031	1234678-HpCDF	67562-39-4	10.8	B	4.96	0.0208	1
11031	1234789-HpCDF	55673-89-7	0.820	JB	4.96	0.0253	1
11031	OCDF	39001-02-0	28.4	B	9.91	0.0312	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	5.09				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 15:02	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 14:44	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 04:40	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:25	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:51	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:51	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:51	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:51	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:47	Damary Valentin	1

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

Sample Description: SL-862-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085564
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:05 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-0 SDG#: PH050-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402A	06/11/2013 22:45	Scott W Freisher	1

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	28.47
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		41.1	7.93	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.514	1
06935	Arsenic	7440-38-2	4.40		4.11	0.339	1
06946	Barium	7440-39-3	74.0		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.613	J	1.03	0.0689	1
07914	Boron	7440-42-8	1.90	J	10.3	0.853	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0339	1
01650	Calcium	7440-70-2	1,790		20.6	4.13	1
06951	Chromium	7440-47-3	13.5		3.08	0.0905	1

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.40		1.03	0.0925	1
06953	Copper	7440-50-8	5.61		2.06	0.185	1
01654	Iron	7439-89-6	17,900		41.1	3.91	1
06955	Lead	7439-92-1	4.11		3.08	0.483	1
01656	Lithium	7439-93-2	25.8		4.1	0.57	1
01657	Magnesium	7439-95-4	4,170		10.3	1.78	1
06958	Manganese	7439-96-5	290		1.03	0.0853	1
06960	Molybdenum	7439-98-7	2.06	U	2.06	0.175	1
06961	Nickel	7440-02-0	8.96		2.06	0.113	1
10145	Phosphorus	7723-14-0	264		10.3	0.524	1
01662	Potassium	7440-09-7	2,070		103	13.9	1
01667	Sodium	7440-23-5	95.0	J	103	17.2	1
06969	Tin	7440-31-5	2.87	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,120		1.03	0.175	1
06971	Vanadium	7440-62-2	30.2		1.03	0.113	1
06972	Zinc	7440-66-6	52.3		4.11	0.206	1
10146	Zirconium	7440-67-7	2.26	J	5.14	0.853	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.411	U	0.411	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0206	2
06144	Strontium	7440-24-6	20.3		0.411	0.0350	2
06145	Thallium	7440-28-0	0.282		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.74		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0519	JQ	1.01	0.0422	1
11031	12378-PeCDD	40321-76-4	0.416	JBQ	5.07	0.0505	1
11031	123478-HxCDD	39227-28-6	0.181	JQ	5.07	0.0277	1
11031	123678-HxCDD	57653-85-7	0.168	JBQ	5.07	0.0297	1
11031	123789-HxCDD	19408-74-3	0.212	JBQ	5.07	0.0288	1
11031	1234678-HpCDD	35822-46-9	1.58	JB	5.07	0.0317	1
11031	OCDD	3268-87-9	23.4	B	10.1	0.0295	1
11031	2378-TCDF	51207-31-9	0.121	JQ	1.01	0.0352	1
11031	12378-PeCDF	57117-41-6	0.492	JB	5.07	0.0293	1
11031	23478-PeCDF	57117-31-4	0.328	JB	5.07	0.0262	1
11031	123478-HxCDF	70648-26-9	0.231	JB	5.07	0.0174	1
11031	123678-HxCDF	57117-44-9	0.222	JBQ	5.07	0.0159	1
11031	123789-HxCDF	72918-21-9	0.132	JBQ	5.07	0.0175	1
11031	234678-HxCDF	60851-34-5	0.159	JB	5.07	0.0150	1
11031	1234678-HpCDF	67562-39-4	0.228	JB	5.07	0.0130	1
11031	1234789-HpCDF	55673-89-7	0.0901	JBQ	5.07	0.0152	1
11031	OCDF	39001-02-0	0.373	JBQ	10.1	0.0258	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.177				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	53	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	93	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13159SLD026	06/18/2013 15:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13159SLD026	06/10/2013 08:55	Katheryne V Sponheimer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13160A16A	06/10/2013 02:11	Laura M Krieger	28.47
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201315831343	06/07/2013 14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201315831343	06/07/2013 14:34	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 12:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/19/2013 20:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:29	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:53	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:53	Choon Y Tian	2

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

Sample Description: SL-862-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7085565
LLI Group # 1395501
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/06/2013 15:40 by VC

Submitted: 06/07/2013 09:20
Reported: 06/20/2013 12:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

862-4 SDG#: PH050-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:53	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:53	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638002	06/16/2013 07:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638002	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13158039402A	06/07/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13162162402B	06/11/2013 22:45	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13159SLD026	Sample number(s): 7085556-7085558,7085560-7085565									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	92		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	96		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	102		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	100		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	92		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	108		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	92		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	100		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	105		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	97		71-120		
Batch number: 13160A16A	Sample number(s): 7085562,7085565									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 13164C20A	Sample number(s): 7085555									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	101	97	75-135	4	30
Batch number: 131630028A	Sample number(s): 7085556-7085558,7085560-7085565									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	97		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	100		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	106		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131640637001	Sample number(s): 7085556-7085565									
Aluminum	8.46	J	40.0	7.71	mg/kg	101		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	106		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	95		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Calcium	9.77	J	20.0	4.02	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	106		80-120		
Phosphorus	1.17	J	10.0	0.510	mg/kg	106		80-120		
Potassium	100 U		100.	13.5	mg/kg	97		80-120		
Sodium	100 U		100.	16.7	mg/kg	97		80-120		
Tin	1.48	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	98		80-120		
Zinc	1.92	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	104		80-120		
Batch number: 131640637001A	Sample number(s): 7085556-7085565									
Silver	0.200	U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0566	J	0.400	0.0340	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 131640637001B	Sample number(s): 7085556-7085565									
Selenium	0.400	U	0.400	0.100	mg/kg	109		80-120		
Batch number: 131640638002	Sample number(s): 7085556-7085565									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	96		85-120		
Batch number: 13158039402A	Sample number(s): 7085556,7085559-7085565									
15a pH by 9045D						100		95-105		
Batch number: 13162162402A	Sample number(s): 7085556-7085564									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13162162402B	Sample number(s): 7085565									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13165001	Sample number(s): 7085556-7085558,7085560-7085562,7085565									
2378-TCDD	1.00	U	1.00	0.0268	ng/kg	99		67-158		
12378-PeCDD	0.0542	J	5.00	0.0310	ng/kg	101		70-142		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDD	5.00	U	5.00	0.0174	ng/kg	107		70-164		
123678-HxCDD	0.0389	J	5.00	0.0179	ng/kg	105		76-134		
123789-HxCDD	0.0490	J	5.00	0.0182	ng/kg	106		64-162		
1234678-HpCDD	0.0445	J	5.00	0.0188	ng/kg	106		70-140		
OCDD	0.385	J	10.0	0.0213	ng/kg	105		78-144		
2378-TCDF	1.00	U	1.00	0.0212	ng/kg	102		75-158		
12378-PeCDF	0.0711	J	5.00	0.0136	ng/kg	106		80-134		
23478-PeCDF	0.0370	J	5.00	0.0134	ng/kg	107		68-160		
123478-HxCDF	0.0411	J	5.00	0.00900	ng/kg	108		72-134		
123678-HxCDF	0.0374	J	5.00	0.00850	ng/kg	108		84-130		
123789-HxCDF	0.0753	J	5.00	0.0106	ng/kg	107		78-130		
234678-HxCDF	0.0261	J	5.00	0.00840	ng/kg	107		70-156		
1234678-HpCDF	0.0586	J	5.00	0.00600	ng/kg	106		82-122		
1234789-HpCDF	0.0448	J	5.00	0.0106	ng/kg	105		78-138		
OCDF	0.124	J	10.0	0.0277	ng/kg	106		63-170		
Batch number: 13168007	Sample number(s): 7085563-7085564									
2378-TCDD	0.0457	J	1.00	0.0292	ng/kg	92		67-158		
12378-PeCDD	0.148	J	5.00	0.0366	ng/kg	102		70-142		
123478-HxCDD	0.0884	J	5.00	0.0192	ng/kg	108		70-164		
123678-HxCDD	0.0822	J	5.00	0.0203	ng/kg	105		76-134		
123789-HxCDD	0.0979	J	5.00	0.0192	ng/kg	106		64-162		
1234678-HpCDD	0.0960	J	5.00	0.0192	ng/kg	103		70-140		
OCDD	0.435	J	10.0	0.0241	ng/kg	104		78-144		
2378-TCDF	0.0331	J	1.00	0.0249	ng/kg	106		75-158		
12378-PeCDF	0.209	J	5.00	0.0200	ng/kg	102		80-134		
23478-PeCDF	0.232	J	5.00	0.0217	ng/kg	104		68-160		
123478-HxCDF	0.131	J	5.00	0.0132	ng/kg	107		72-134		
123678-HxCDF	0.122	J	5.00	0.0118	ng/kg	103		84-130		
123789-HxCDF	0.136	J	5.00	0.0163	ng/kg	103		78-130		
234678-HxCDF	0.0987	J	5.00	0.0127	ng/kg	104		70-156		
1234678-HpCDF	0.0640	J	5.00	0.00540	ng/kg	102		82-122		
1234789-HpCDF	0.0329	J	5.00	0.0103	ng/kg	103		78-138		
OCDF	0.129	J	10.0	0.0282	ng/kg	102		63-170		
Batch number: 13165001	Sample number(s): 7085556-7085558,7085560-7085562,7085565									
TEQ WHO 2005 - EDLx0.0	0.0112				ng/kg					
Batch number: 13168007	Sample number(s): 7085563-7085564									
TEQ WHO 2005 - EDLx0.0	0.266				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13159SLD026	Sample number(s): 7085556-7085558,7085560-7085565 UNSPK: 7085556								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Acenaphthene	83	89	48-127	6	30				
Acenaphthylene	86	90	49-121	4	30				
Anthracene	84	91	52-126	8	30				
Benzo(a)anthracene	85	92	32-135	8	30				
Benzo(a)pyrene	77	86	36-138	10	30				
Benzo(b)fluoranthene	96	99	26-142	3	30				
Benzo(e)pyrene	77	84	70-130	8	30				
Benzo(g,h,i)perylene	64	68	33-141	5	30				
Benzo(k)fluoranthene	75	87	47-129	14	30				
Butylbenzylphthalate	93	99	59-153	6	30				
Di-n-butylphthalate	101	103	62-154	2	30				
Chrysene	81	89	29-148	10	30				
Dibenz(a,h)anthracene	66	71	34-125	6	30				
Diethylphthalate	62*	80	76-127	25	30				
Dimethylphthalate	81	82	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	108	120	39-167	11	30				
Fluoranthene	90	99	47-135	9	30				
Fluorene	80	92	50-129	13	30				
Indeno(1,2,3-cd)pyrene	68	74	17-136	8	30				
1-Methylnaphthalene	91	96	50-131	5	30				
2-Methylnaphthalene	91	95	28-144	4	30				
Naphthalene	85	90	31-148	5	30				
N-Nitrosodimethylamine	93	90	48-113	4	30				
Di-n-octylphthalate	229*	-8*	52-162	98*	30				
Phenanthrene	86	93	29-142	7	30				
Pyrene	80	88	26-143	9	30				
Batch number: 13160A16A	Sample number(s): 7085562,7085565 UNSPK: P081064								
11a TPH by EPA 8015B GRO	103	101	39-118	7	30				
Batch number: 131630028A	Sample number(s): 7085556-7085558,7085560-7085565 UNSPK: 7085556								
EFH (C12-C14)	99	101	49-123	3	20				
EFH (C15-C20)	130*	171*	49-123	28*	20				
EFH (C21-C30)	23*	182*	49-123	59*	20				
EFH (C30-C40)	-32*	276*	49-123	75*	20				
EFH (C8-C11)	83	84	49-123	2	20				
Batch number: 131640637001	Sample number(s): 7085556-7085565 UNSPK: 7085556 BKG: 7085556								
Aluminum	1575 (2)	1333 (2)	75-125	3	20	14,600	14,300	2	20
Antimony	61*	61*	75-125	0	20	3.88 U	3.88 U	0 (1)	20
Arsenic	99	98	75-125	1	20	4.93	5.27	7 (1)	20
Barium	102	100	75-125	1	20	105	106	1	20
Beryllium	100	100	75-125	0	20	0.626 J	0.624 J	0 (1)	20
Boron	96	95	75-125	0	20	4.64 J	3.81 J	20 (1)	20
Cadmium	96	95	75-125	1	20	0.971 U	0.971 U	0 (1)	20
Calcium	133 (2)	120 (2)	75-125	2	20	2,420	2,300	5	20
Chromium	113	107	75-125	3	20	22.0	22.3	1	20
Cobalt	95	94	75-125	1	20	5.48	5.86	7	20
Copper	100	100	75-125	0	20	11.6	11.6	0	20
Iron	767 (2)	-175 (2)	75-125	5	20	19,000	19,300	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Lead	97	95	75-125	1	20	8.32	8.57	3 (1)	20
Lithium	105	103	75-125	1	20	23.2	23.2	0	20
Magnesium	216 (2)	144 (2)	75-125	3	20	4,390	4,400	0	20
Manganese	115 (2)	79 (2)	75-125	5	20	321	334	4	20
Molybdenum	95	95	75-125	0	20	0.687 J	0.500 J	32* (1)	20
Nickel	97	97	75-125	0	20	14.7	14.8	1	20
Phosphorus	97 (2)	72 (2)	75-125	5	20	429	415	3	20
Potassium	135 (2)	126 (2)	75-125	2	20	3,930	3,910	0	20
Sodium	97	97	75-125	1	20	69.7 J	68.3 J	2 (1)	20
Tin	90	90	75-125	0	20	2.75 J	2.75 J	0 (1)	20
Titanium	321 (2)	280 (2)	75-125	3	20	1,170	1,140	3	20
Vanadium	106	102	75-125	2	20	37.2	37.6	1	20
Zinc	100	97	75-125	2	20	62.6	62.3	0	20
Zirconium	92	91	75-125	1	20	2.86 J	3.45 J	19 (1)	20
Batch number: 131640637001A	Sample number(s): 7085556-7085565 UNSPK: 7085556 BKG: 7085556								
Silver	112	122	75-125	8	20	0.0429 J	0.0940 J	75* (1)	20
Strontium	121	153*	75-125	7	20	22.8	30.2	28*	20
Thallium	138*	137*	75-125	0	20	0.299	0.397	28* (1)	20
Batch number: 131640637001B	Sample number(s): 7085556-7085565 UNSPK: 7085556 BKG: 7085556								
Selenium	111	117	75-125	5	20	0.148 J	0.230 J	43* (1)	20
Batch number: 131640638002	Sample number(s): 7085556-7085565 UNSPK: 7085556 BKG: 7085556								
3a Mercury 7471A	101	98	65-135	3	20	0.0164 U	0.0160 U	0 (1)	20
Batch number: 13158039402A	Sample number(s): 7085556,7085559-7085565 BKG: 7085556								
15a pH by 9045D						6.45	6.42	0	3
Batch number: 13162162402A	Sample number(s): 7085556-7085564 BKG: 7085556								
14a Moisture Content by 160.3						2.8	2.7	1	20
14a Moisture Content by 160.3						2.8	2.7	1	20
14a Moisture Content by 160.3						2.8	2.7	1	20
Batch number: 13162162402B	Sample number(s): 7085565 BKG: 7085565								
14a Moisture Content by 160.3						3.7	3.5	4	20
Batch number: 13165001	Sample number(s): 7085556-7085558,7085560-7085562,7085565 UNSPK: 7085556								
2378-TCDD	97	98	40-135	2	20				
12378-PeCDD	100	100	40-135	4	20				
123478-HxCDD	107	108	40-135	3	20				
123678-HxCDD	105	106	40-135	3	20				
123789-HxCDD	106	105	40-135	4	20				
1234678-HpCDD	118	120	40-135	2	20				
OCDD	207*	221*	40-135	3	20				
2378-TCDF	104	103	40-135	4	20				
12378-PeCDF	106	106	40-135	3	20				
23478-PeCDF	105	107	40-135	1	20				
123478-HxCDF	108	108	40-135	3	20				
123678-HxCDF	107	107	40-135	3	20				
123789-HxCDF	108	109	40-135	3	20				
234678-HxCDF	107	107	40-135	3	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1234678-HpCDF	110	112	40-135	2	20				
1234789-HpCDF	106	107	40-135	2	20				
OCDF	114	114	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13159SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7085556	83	88	97
7085557	76	78	92
7085558	80	80	93
7085560	85	88	99
7085561	82	84	95
7085562	79	84	92
7085563	84	90	96
7085564	86	82	100
7085565	88	94	98
Blank	85	93	96
LCS	85	93	99
MS	76	78	92
MSD	80	80	93
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13160A16A

	Trifluorotoluene-F
7085562	85
7085565	73
Blank	87
LCS	93
MS	80
MSD	91
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13164C20A

	Trifluorotoluene-F
7085555	87

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Surrogate Quality Control

Blank	86
LCS	115
LCSD	115
Limits:	63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131630028A

	Chlorobenzene	Orthoterphenyl
7085556	93	96
7085557	101	109
7085558	95	100
7085560	98	106
7085561	89	92
7085562	93	100
7085563	93	99
7085564	100	104
7085565	96	102
Blank	99	105
LCS	99	106
MS	101	109
MSD	95	100
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13165001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7085556	70	77	83	86	87	82
7085557	69	77	82	89	87	79
7085558	64	70	78	80	86	78
7085560	64	73	76	80	77	79
7085561	63	71	77	82	85	73
7085562	83	91	95	99	103	94
7085565	53	66	69	75	76	75
Blank	66	75	87	96	89	83
MS	69	77	82	89	87	79
MSD	64	70	78	80	86	78
OPR	59	68	73	83	75	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7085556	91	72	68	75	76	81
7085557	107	69	62	75	80	80
7085558	85	70	68	68	74	75
7085560	95	77	72	72	74	74
7085561	92	63	56	70	75	78
7085562	99	81	75	89	91	91
7085565	87	87	93	66	71	72
Blank	119	78	75	73	80	85
MS	107	69	62	75	80	80
MSD	85	70	68	68	74	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395501
Reported: 06/20/13 at 12:36 PM

Surrogate Quality Control

OPR	99	53	45	66	70	71
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7085556	77	76	74	66	75	
7085557	78	75	76	65	80	
7085558	73	70	69	59	69	
7085560	74	81	83	63	73	
7085561	74	72	69	61	72	
7085562	90	88	85	80	89	
7085565	71	82	92	51	63	
Blank	82	86	89	64	78	
MS	78	75	76	65	80	
MSD	73	70	69	59	69	
OPR	70	67	67	57	73	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13168007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7085563	66	71	75	85	78	72
7085564	80	85	87	89	87	88
Blank	71	75	79	90	84	74
OPR	60	63	68	82	73	63
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7085563	109	74	71	73	78	80
7085564	97	91	88	85	82	83
Blank	127	79	78	82	87	89
OPR	114	67	67	69	76	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7085563	78	88	91	60	74	
7085564	83	89	95	77	84	
Blank	87	98	104	64	82	
OPR	75	87	95	53	69	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Ap# 1395501 Sample# 7085555-65

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/6/2013
CarrierName: FedEx
AirbillNo: 799943102615

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130606-02
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-060613	6/6/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-871-SA5A-SB-0.0-0.5MS	6/6/13 10:30	SO	None	6 - SS-Sleeve	10 day	X	X					X		X											X											MS/MSD
SL-871-SA5A-SB-0.0-0.5MS	6/6/13 10:30	SO	None	1 - 8 oz glass	10 day													X																	MS/MSD
SL-1271-SA5A-SB-0.0-0.5	6/6/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-1271-SA5A-SB-0.0-0.5	6/6/13 10:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-872-SA5A-SB-0.0-0.5	6/6/13 12:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-872-SA5A-SB-0.0-0.5	6/6/13 12:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-872-SA5A-SB-2.5-3.5	6/6/13 13:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-872-SA5A-SB-2.5-3.5	6/6/13 13:20	SO	None	2 - Encore	10 day																			X												
SL-873-SA5A-SB-0.0-0.5	6/6/13 14:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-873-SA5A-SB-0.0-0.5	6/6/13 14:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-862-SA5A-SB-0.0-0.5	6/6/13 15:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-862-SA5A-SB-0.0-0.5	6/6/13 15:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-862-SA5A-SB-4.5-5.5	6/6/13 15:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-862-SA5A-SB-4.5-5.5	6/6/13 15:40	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
~~Stuart~~ Myself	06/06/13	1600									
									[illegible]	6/7/13	0920

COC Rev 2

Subarea 5A

eurofins | Lancaster Laboratories

C#1395501

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM Smith

Date of Receipt: 6/7/13

Time of Receipt: 0920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	1396	4.0	ST	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: CEish 3647 **Date/Time:** 6/7/13 1030

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 21, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/08/2013
Group Number: 1395738
SDG: PH051
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-827-SA5A-SB-0.0-0.5 Soil	7086819
SL-845-SA5A-SB-0.0-0.5 Soil	7086820
SL-846-SA5A-SB-0.0-0.5 Soil	7086821
SL-847-SA5A-SB-0.0-0.5 Soil	7086822
SL-848-SA5A-SB-0.0-0.5 Soil	7086823

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.8		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.1	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.5	J	1.7	0.67	1
12969	Fluorene	86-73-7	0.75	J	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	0.69	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	28		18	6.1	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	8.7		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	19		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.1	7.73	1
06944	Antimony	7440-36-0	0.602	J	4.01	0.501	1
06935	Arsenic	7440-38-2	3.85	J	4.01	0.331	1
06946	Barium	7440-39-3	112		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.590	J	1.00	0.0671	1
07914	Boron	7440-42-8	7.68	J	10.0	0.832	1
06949	Cadmium	7440-43-9	0.544	J	1.00	0.0331	1
01650	Calcium	7440-70-2	2,380		20.0	4.03	1
06951	Chromium	7440-47-3	18.3		3.01	0.0882	1
06952	Cobalt	7440-48-4	5.11		1.00	0.0902	1
06953	Copper	7440-50-8	9.53		2.00	0.180	1
01654	Iron	7439-89-6	18,200		40.1	3.81	1
06955	Lead	7439-92-1	8.89		3.01	0.471	1
01656	Lithium	7439-93-2	19.6		4.0	0.55	1

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

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,740		10.0	1.73	1
06958	Manganese	7439-96-5	364		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.508	J	2.00	0.170	1
06961	Nickel	7440-02-0	12.0		2.00	0.110	1
10145	Phosphorus	7723-14-0	404		10.0	0.511	1
01662	Potassium	7440-09-7	3,650		100	13.5	1
01667	Sodium	7440-23-5	74.7	J	100	16.7	1
06969	Tin	7440-31-5	2.76	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,130		1.00	0.170	1
06971	Vanadium	7440-62-2	32.5		1.00	0.110	1
06972	Zinc	7440-66-6	57.1		4.01	0.200	1
10146	Zirconium	7440-67-7	3.49	J	5.01	0.832	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	U	0.401	0.100	2
06142	Silver	7440-22-4	0.0590	J	0.200	0.0200	2
06144	Strontium	7440-24-6	23.4		0.401	0.0341	2
06145	Thallium	7440-28-0	0.274		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0144	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.30		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.975	U	0.975	0.0294	1
11031	12378-PeCDD	40321-76-4	0.106	JBQ	4.88	0.0353	1
11031	123478-HxCDD	39227-28-6	0.230	JB	4.88	0.0329	1
11031	123678-HxCDD	57653-85-7	0.535	JB	4.88	0.0338	1
11031	123789-HxCDD	19408-74-3	0.535	JB	4.88	0.0342	1
11031	1234678-HpCDD	35822-46-9	11.3	B	4.88	0.0397	1
11031	OCDD	3268-87-9	195	B	9.75	0.0317	1
11031	2378-TCDF	51207-31-9	0.181	JBQ	0.975	0.0427	1
11031	12378-PeCDF	57117-41-6	0.298	JB	4.88	0.0231	1
11031	23478-PeCDF	57117-31-4	0.221	JB	4.88	0.0214	1
11031	123478-HxCDF	70648-26-9	0.160	JBQ	4.88	0.0219	1
11031	123678-HxCDF	57117-44-9	0.183	JB	4.88	0.0180	1
11031	123789-HxCDF	72918-21-9	0.203	JB	4.88	0.0253	1
11031	234678-HxCDF	60851-34-5	0.191	JBQ	4.88	0.0196	1
11031	1234678-HpCDF	67562-39-4	1.89	JB	4.88	0.0172	1
11031	1234789-HpCDF	55673-89-7	0.155	JB	4.88	0.0275	1
11031	OCDF	39001-02-0	6.08	JB	9.75	0.0273	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.438				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161SLF026	06/19/2013 03:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13161SLF026	06/11/2013 09:30	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 13:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 19:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06944	Antimony	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06946	Barium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
07914	Boron	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01650	Calcium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06951	Chromium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06953	Copper	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01654	Iron	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06955	Lead	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01656	Lithium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06958	Manganese	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06961	Nickel	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01662	Potassium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
01667	Sodium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06969	Tin	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06970	Titanium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06972	Zinc	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131600637001	06/11/2013 17:58	John P Hook	1
06141	Selenium	SW-846 6020A	1	131600637001B	06/11/2013 18:39	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637001A	06/11/2013 18:39	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637001A	06/11/2013 18:39	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637001A	06/11/2013 18:39	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:56	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637001	06/10/2013 23:43	Annamaria Stipkovits	1

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

Sample Description: SL-827-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086819
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 11:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL827 SDG#: PH051-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13159039401A	06/08/2013 14:13	Michelle L Ruiter	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13163162401A	06/12/2013 20:12	Scott W Freisher	1

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

Sample Description: SL-845-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086820
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 08:40 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL845 SDG#: PH051-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	1.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-845-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086820
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 08:40 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL845 SDG#: PH051-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0607	JQ	0.996	0.0245	1
11031	12378-PeCDD	40321-76-4	0.406	JB	4.98	0.0371	1
11031	123478-HxCDD	39227-28-6	0.560	J	4.98	0.0341	1
11031	123678-HxCDD	57653-85-7	1.23	JB	4.98	0.0361	1
11031	123789-HxCDD	19408-74-3	1.38	JB	4.98	0.0360	1
11031	1234678-HpCDD	35822-46-9	43.6	B	4.98	0.0493	1
11031	OCDD	3268-87-9	568	B	9.96	0.0351	1
11031	2378-TCDF	51207-31-9	0.143	J	0.996	0.0333	1
11031	12378-PeCDF	57117-41-6	0.415	JBQ	4.98	0.0225	1
11031	23478-PeCDF	57117-31-4	0.420	JBQ	4.98	0.0201	1
11031	123478-HxCDF	70648-26-9	0.415	JB	4.98	0.0242	1
11031	123678-HxCDF	57117-44-9	0.847	JB	4.98	0.0216	1
11031	123789-HxCDF	72918-21-9	0.287	JB	4.98	0.0251	1
11031	234678-HxCDF	60851-34-5	0.467	JB	4.98	0.0211	1
11031	1234678-HpCDF	67562-39-4	11.5	B	4.98	0.0182	1
11031	1234789-HpCDF	55673-89-7	0.969	JB	4.98	0.0241	1
11031	OCDF	39001-02-0	48.1	B	9.96	0.0250	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.69				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-845-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086820
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 08:40 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL845 SDG#: PH051-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-845-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086820
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 08:40 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL845 SDG#: PH051-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/19/2013 21:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13163162401A	06/12/2013 20:12	Scott W Freisher	1

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.75	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	0.71	J	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	120		19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	14		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	31		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500		41.5	8.01	1
06944	Antimony	7440-36-0	0.697	J	4.15	0.519	1
06935	Arsenic	7440-38-2	5.55		4.15	0.343	1
06946	Barium	7440-39-3	104		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.761	J	1.04	0.0696	1
07914	Boron	7440-42-8	7.96	J	10.4	0.862	1
06949	Cadmium	7440-43-9	0.548	J	1.04	0.0343	1
01650	Calcium	7440-70-2	1,940		20.8	4.17	1
06951	Chromium	7440-47-3	22.4		3.12	0.0914	1
06952	Cobalt	7440-48-4	6.00		1.04	0.0935	1
06953	Copper	7440-50-8	9.74		2.08	0.187	1
01654	Iron	7439-89-6	21,500		41.5	3.95	1
06955	Lead	7439-92-1	8.18		3.12	0.488	1
01656	Lithium	7439-93-2	23.2		4.2	0.57	1

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,260		10.4	1.80	1
06958	Manganese	7439-96-5	329		1.04	0.0862	1
06960	Molybdenum	7439-98-7	0.560	J	2.08	0.177	1
06961	Nickel	7440-02-0	13.8		2.08	0.114	1
10145	Phosphorus	7723-14-0	336		10.4	0.530	1
01662	Potassium	7440-09-7	3,360		104	14.0	1
01667	Sodium	7440-23-5	85.5	J	104	17.3	1
06969	Tin	7440-31-5	2.96	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,270		1.04	0.177	1
06971	Vanadium	7440-62-2	41.3		1.04	0.114	1
06972	Zinc	7440-66-6	56.9		4.15	0.208	1
10146	Zirconium	7440-67-7	3.71	J	5.19	0.862	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.164	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0467	J	0.208	0.0208	2
06144	Strontium	7440-24-6	21.8		0.415	0.0353	2
06145	Thallium	7440-28-0	0.294		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.31		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0505	J	1.00	0.0345	1
11031	12378-PeCDD	40321-76-4	0.298	JB	5.02	0.0399	1
11031	123478-HxCDD	39227-28-6	0.403	J	5.02	0.0480	1
11031	123678-HxCDD	57653-85-7	0.926	JB	5.02	0.0517	1
11031	123789-HxCDD	19408-74-3	1.10	JB	5.02	0.0490	1
11031	1234678-HpCDD	35822-46-9	24.3	B	5.02	0.0557	1
11031	OCDD	3268-87-9	309	B	10.0	0.0409	1
11031	2378-TCDF	51207-31-9	0.181	J	1.00	0.0485	1
11031	12378-PeCDF	57117-41-6	0.447	JB	5.02	0.0305	1
11031	23478-PeCDF	57117-31-4	0.372	JB	5.02	0.0275	1
11031	123478-HxCDF	70648-26-9	0.394	JB	5.02	0.0276	1
11031	123678-HxCDF	57117-44-9	0.268	JB	5.02	0.0254	1
11031	123789-HxCDF	72918-21-9	0.345	JB	5.02	0.0291	1
11031	234678-HxCDF	60851-34-5	0.305	JB	5.02	0.0252	1
11031	1234678-HpCDF	67562-39-4	4.94	JB	5.02	0.0227	1
11031	1234789-HpCDF	55673-89-7	0.502	JB	5.02	0.0256	1
11031	OCDF	39001-02-0	21.0	B	10.0	0.0267	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.26				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	88	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161SLF026	06/19/2013 04:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13161SLF026	06/11/2013 09:30	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 13:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/20/2013 17:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06944	Antimony	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06946	Barium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
07914	Boron	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01650	Calcium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06951	Chromium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06953	Copper	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01654	Iron	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06955	Lead	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01656	Lithium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06958	Manganese	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06961	Nickel	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01662	Potassium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
01667	Sodium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06969	Tin	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06970	Titanium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06972	Zinc	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131600637001	06/11/2013 18:03	John P Hook	1
06141	Selenium	SW-846 6020A	1	131600637001B	06/11/2013 18:42	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637001A	06/11/2013 18:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637001A	06/11/2013 18:42	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637001A	06/11/2013 18:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 18:58	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637001	06/10/2013 23:43	Annamaria Stipkovits	1

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

Sample Description: SL-846-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086821
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL846 SDG#: PH051-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13159039401A	06/08/2013 14:13	Michelle L Ruiter	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13163162401A	06/12/2013 20:12	Scott W Freisher	1

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.84	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	13	J	18	6.0	1
12969	Phenanthrene	85-01-8	0.83	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.2	J	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	7.5		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	26		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		39.1	7.53	1
06944	Antimony	7440-36-0	0.814	J	3.91	0.488	1
06935	Arsenic	7440-38-2	4.91		3.91	0.322	1
06946	Barium	7440-39-3	118		0.977	0.0322	1
06947	Beryllium	7440-41-7	0.678	J	0.977	0.0654	1
07914	Boron	7440-42-8	8.16	J	9.77	0.811	1
06949	Cadmium	7440-43-9	0.609	J	0.977	0.0322	1
01650	Calcium	7440-70-2	2,360		19.5	3.93	1
06951	Chromium	7440-47-3	21.2		2.93	0.0859	1
06952	Cobalt	7440-48-4	5.57		0.977	0.0879	1
06953	Copper	7440-50-8	10.5		1.95	0.176	1
01654	Iron	7439-89-6	20,200		39.1	3.71	1
06955	Lead	7439-92-1	6.67		2.93	0.459	1
01656	Lithium	7439-93-2	21.3		3.9	0.54	1

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,100		9.77	1.69	1
06958	Manganese	7439-96-5	352		0.977	0.0811	1
06960	Molybdenum	7439-98-7	0.559	J	1.95	0.166	1
06961	Nickel	7440-02-0	13.2		1.95	0.107	1
10145	Phosphorus	7723-14-0	381		9.77	0.498	1
01662	Potassium	7440-09-7	3,760		97.7	13.2	1
01667	Sodium	7440-23-5	76.3	J	97.7	16.3	1
06969	Tin	7440-31-5	2.85	J	9.77	0.215	1
06970	Titanium	7440-32-6	1,210		0.977	0.166	1
06971	Vanadium	7440-62-2	37.8		0.977	0.107	1
06972	Zinc	7440-66-6	58.1		3.91	0.195	1
10146	Zirconium	7440-67-7	3.90	J	4.88	0.811	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.391	0.0977	2
06142	Silver	7440-22-4	0.0371	J	0.195	0.0195	2
06144	Strontium	7440-24-6	24.7		0.391	0.0332	2
06145	Thallium	7440-28-0	0.255		0.195	0.0293	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0109	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.63		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.58		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0294 JQ	0.971	0.0214	1
11031	12378-PeCDD	40321-76-4	0.0575 JBQ	4.85	0.0251	1
11031	123478-HxCDD	39227-28-6	0.0180 JQ	4.85	0.0158	1
11031	123678-HxCDD	57653-85-7	0.0926 JB	4.85	0.0171	1
11031	123789-HxCDD	19408-74-3	0.181 JB	4.85	0.0152	1
11031	1234678-HpCDD	35822-46-9	0.206 JBQ	4.85	0.0186	1
11031	OCDD	3268-87-9	1.87 JB	9.71	0.0193	1
11031	2378-TCDF	51207-31-9	0.0286 JQ	0.971	0.0162	1
11031	12378-PeCDF	57117-41-6	0.0698 JBQ	4.85	0.0149	1
11031	23478-PeCDF	57117-31-4	0.0462 JBQ	4.85	0.0139	1
11031	123478-HxCDF	70648-26-9	0.0583 JBQ	4.85	0.0147	1
11031	123678-HxCDF	57117-44-9	0.0642 JB	4.85	0.0147	1
11031	123789-HxCDF	72918-21-9	0.146 JB	4.85	0.00986	1
11031	234678-HxCDF	60851-34-5	0.0242 JB	4.85	0.00875	1
11031	1234678-HpCDF	67562-39-4	0.0806 JB	4.85	0.0139	1
11031	1234789-HpCDF	55673-89-7	0.0465 JB	4.85	0.00976	1
11031	OCDF	39001-02-0	0.184 JB	9.71	0.0190	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0528			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	52	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	56	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161SLF026	06/19/2013 06:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13161SLF026	06/11/2013 09:30	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 13:56	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/20/2013 18:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06944	Antimony	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06946	Barium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
07914	Boron	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01650	Calcium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06951	Chromium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06953	Copper	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01654	Iron	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06955	Lead	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01656	Lithium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06958	Manganese	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06961	Nickel	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01662	Potassium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
01667	Sodium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06969	Tin	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06970	Titanium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06972	Zinc	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131600637001	06/11/2013 18:07	John P Hook	1
06141	Selenium	SW-846 6020A	1	131600637001B	06/11/2013 18:44	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637001A	06/11/2013 18:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637001A	06/11/2013 18:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637001A	06/11/2013 18:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 19:00	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637001	06/10/2013 23:43	Annamaria Stipkovits	1

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

Sample Description: SL-847-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086822
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 09:45 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL847 SDG#: PH051-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13159039401A	06/08/2013 14:13	Michelle L Ruiter	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13163162401A	06/12/2013 20:12	Scott W Freisher	1

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	0.87	J	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.88	J	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	69		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	160		18	6.0	1
12969	Fluoranthene	206-44-0	2.2		1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7		1.7	0.66	1
12969	Pyrene	129-00-0	6.8		1.7	0.66	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	28		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,700		39.5	7.61	1
06944	Antimony	7440-36-0	0.681	J	3.95	0.493	1
06935	Arsenic	7440-38-2	4.67		3.95	0.326	1
06946	Barium	7440-39-3	124		0.987	0.0326	1
06947	Beryllium	7440-41-7	0.674	J	0.987	0.0661	1
07914	Boron	7440-42-8	8.23	J	9.87	0.819	1
06949	Cadmium	7440-43-9	0.628	J	0.987	0.0326	1
01650	Calcium	7440-70-2	2,710		19.7	3.97	1
06951	Chromium	7440-47-3	21.2		2.96	0.0868	1
06952	Cobalt	7440-48-4	5.65		0.987	0.0888	1
06953	Copper	7440-50-8	10.7		1.97	0.178	1
01654	Iron	7439-89-6	20,100		39.5	3.75	1
06955	Lead	7439-92-1	11.0		2.96	0.464	1
01656	Lithium	7439-93-2	21.8		3.9	0.54	1

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,190		9.87	1.71	1
06958	Manganese	7439-96-5	363		0.987	0.0819	1
06960	Molybdenum	7439-98-7	0.545	J	1.97	0.168	1
06961	Nickel	7440-02-0	13.7		1.97	0.109	1
10145	Phosphorus	7723-14-0	418		9.87	0.503	1
01662	Potassium	7440-09-7	4,110		98.7	13.3	1
01667	Sodium	7440-23-5	84.6	J	98.7	16.5	1
06969	Tin	7440-31-5	2.82	J	9.87	0.217	1
06970	Titanium	7440-32-6	1,230		0.987	0.168	1
06971	Vanadium	7440-62-2	37.9		0.987	0.109	1
06972	Zinc	7440-66-6	63.2		3.95	0.197	1
10146	Zirconium	7440-67-7	3.57	J	4.93	0.819	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.395	0.0987	2
06142	Silver	7440-22-4	0.0515	J	0.197	0.0197	2
06144	Strontium	7440-24-6	28.0		0.395	0.0336	2
06145	Thallium	7440-28-0	0.261		0.197	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0153	J	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.22		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.65		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.968	U	0.968	0.0220	1
11031	12378-PeCDD	40321-76-4	0.214	JBQ	4.84	0.0304	1
11031	123478-HxCDD	39227-28-6	0.256	J	4.84	0.0313	1
11031	123678-HxCDD	57653-85-7	0.709	JB	4.84	0.0327	1
11031	123789-HxCDD	19408-74-3	0.787	JB	4.84	0.0304	1
11031	1234678-HpCDD	35822-46-9	14.3	B	4.84	0.0409	1
11031	OCDD	3268-87-9	195	B	9.68	0.0274	1
11031	2378-TCDF	51207-31-9	0.185	J	0.968	0.0331	1
11031	12378-PeCDF	57117-41-6	0.339	JB	4.84	0.0228	1
11031	23478-PeCDF	57117-31-4	0.133	JBQ	4.84	0.0206	1
11031	123478-HxCDF	70648-26-9	0.404	JB	4.84	0.0246	1
11031	123678-HxCDF	57117-44-9	0.227	JB	4.84	0.0251	1
11031	123789-HxCDF	72918-21-9	0.315	JBQ	4.84	0.0175	1
11031	234678-HxCDF	60851-34-5	0.207	JB	4.84	0.0158	1
11031	1234678-HpCDF	67562-39-4	2.48	JB	4.84	0.0229	1
11031	1234789-HpCDF	55673-89-7	0.248	JB	4.84	0.0168	1
11031	OCDF	39001-02-0	8.72	JB	9.68	0.0197	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.519				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	54	26 - 152
13C12-123678-HxCDF	53	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13161SLF026	06/19/2013 05:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13161SLF026	06/11/2013 09:30	William H Saadeh	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131630028A	06/15/2013 14:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131630028A	06/13/2013 08:00	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13165001	06/20/2013 18:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13165001	06/14/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06944	Antimony	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06946	Barium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
07914	Boron	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01650	Calcium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06951	Chromium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06953	Copper	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01654	Iron	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06955	Lead	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01656	Lithium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06958	Manganese	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06961	Nickel	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01662	Potassium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
01667	Sodium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06969	Tin	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06970	Titanium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06972	Zinc	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131600637001	06/11/2013 18:11	John P Hook	1
06141	Selenium	SW-846 6020A	1	131600637001B	06/11/2013 18:46	David K Beck	2
06142	Silver	SW-846 6020A	1	131600637001A	06/11/2013 18:46	David K Beck	2
06144	Strontium	SW-846 6020A	1	131600637001A	06/11/2013 18:46	David K Beck	2
06145	Thallium	SW-846 6020A	1	131600637001A	06/11/2013 18:46	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131600638001	06/11/2013 19:06	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131600637001	06/10/2013 23:43	Annamaria Stipkovits	1

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

Sample Description: SL-848-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7086823
LLI Group # 1395738
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/07/2013 10:15 by VC

Submitted: 06/08/2013 09:10
Reported: 06/21/2013 15:18

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL848 SDG#: PH051-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131600638001	06/11/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13159039401A	06/08/2013 14:13	Michelle L Ruiter	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13163162401A	06/12/2013 20:12	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13161SLF026	Sample number(s): 7086819,7086821-7086823									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	103		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	101		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	100		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	110		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	101		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	111		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	104		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	112		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	102		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	115		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		71-120		
Batch number: 131630028A	Sample number(s): 7086819,7086821-7086823									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	97		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	100		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	104		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	106		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131600637001	Sample number(s): 7086819,7086821-7086823									
Aluminum	40.0	U	40.0	7.71	mg/kg	100		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Calcium	11.1	J	20.0	4.02	mg/kg	102		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chromium	3.00	U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	109		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	103		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	106		80-120		
Phosphorus	1.14	J	10.0	0.510	mg/kg	106		80-120		
Potassium	100 U		100.	13.5	mg/kg	98		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.50	J	10.0	0.220	mg/kg	101		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	99		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	104		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	103		80-120		
Batch number: 131600637001A	Sample number(s): 7086819,7086821-7086823									
Silver	0.200	U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0780	J	0.400	0.0340	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	104		80-120		
Batch number: 131600637001B	Sample number(s): 7086819,7086821-7086823									
Selenium	0.400	U	0.400	0.100	mg/kg	100		80-120		
Batch number: 131600638001	Sample number(s): 7086819,7086821-7086823									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	100		85-120		
Batch number: 13159039401A	Sample number(s): 7086819,7086821-7086823									
15a pH by 9045D						99		95-105		
Batch number: 13163162401A	Sample number(s): 7086819-7086823									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13165001	Sample number(s): 7086820-7086823									
2378-TCDD	1.00	U	1.00	0.0268	ng/kg	99		67-158		
12378-PeCDD	0.0542	J	5.00	0.0310	ng/kg	101		70-142		
123478-HxCDD	5.00	U	5.00	0.0174	ng/kg	107		70-164		
123678-HxCDD	0.0389	J	5.00	0.0179	ng/kg	105		76-134		
123789-HxCDD	0.0490	J	5.00	0.0182	ng/kg	106		64-162		
1234678-HpCDD	0.0445	J	5.00	0.0188	ng/kg	106		70-140		
OCDD	0.385	J	10.0	0.0213	ng/kg	105		78-144		
2378-TCDF	1.00	U	1.00	0.0212	ng/kg	102		75-158		
12378-PeCDF	0.0711	J	5.00	0.0136	ng/kg	106		80-134		
23478-PeCDF	0.0370	J	5.00	0.0134	ng/kg	107		68-160		
123478-HxCDF	0.0411	J	5.00	0.00900	ng/kg	108		72-134		
123678-HxCDF	0.0374	J	5.00	0.00850	ng/kg	108		84-130		
123789-HxCDF	0.0753	J	5.00	0.0106	ng/kg	107		78-130		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
234678-HxCDF	0.0261 J	5.00	0.00840	ng/kg	107		70-156		
1234678-HpCDF	0.0586 J	5.00	0.00600	ng/kg	106		82-122		
1234789-HpCDF	0.0448 J	5.00	0.0106	ng/kg	105		78-138		
OCDF	0.124 J	10.0	0.0277	ng/kg	106		63-170		
Batch number: 13168007	Sample number(s): 7086819								
2378-TCDD	0.0457 J	1.00	0.0292	ng/kg	92		67-158		
12378-PeCDD	0.148 J	5.00	0.0366	ng/kg	102		70-142		
123478-HxCDD	0.0884 J	5.00	0.0192	ng/kg	108		70-164		
123678-HxCDD	0.0822 J	5.00	0.0203	ng/kg	105		76-134		
123789-HxCDD	0.0979 J	5.00	0.0192	ng/kg	106		64-162		
1234678-HpCDD	0.0960 J	5.00	0.0192	ng/kg	103		70-140		
OCDD	0.435 J	10.0	0.0241	ng/kg	104		78-144		
2378-TCDF	0.0331 J	1.00	0.0249	ng/kg	106		75-158		
12378-PeCDF	0.209 J	5.00	0.0200	ng/kg	102		80-134		
23478-PeCDF	0.232 J	5.00	0.0217	ng/kg	104		68-160		
123478-HxCDF	0.131 J	5.00	0.0132	ng/kg	107		72-134		
123678-HxCDF	0.122 J	5.00	0.0118	ng/kg	103		84-130		
123789-HxCDF	0.136 J	5.00	0.0163	ng/kg	103		78-130		
234678-HxCDF	0.0987 J	5.00	0.0127	ng/kg	104		70-156		
1234678-HpCDF	0.0640 J	5.00	0.00540	ng/kg	102		82-122		
1234789-HpCDF	0.0329 J	5.00	0.0103	ng/kg	103		78-138		
OCDF	0.129 J	10.0	0.0282	ng/kg	102		63-170		
Batch number: 13165001	Sample number(s): 7086820-7086823								
TEQ WHO 2005 - EDLx0.0	0.0112			ng/kg					
Batch number: 13168007	Sample number(s): 7086819								
TEQ WHO 2005 - EDLx0.0	0.266			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13161SLF026	Sample number(s): 7086819,7086821-7086823 UNSPK: 7086819								
Acenaphthene	78	70	48-127	11	30				
Acenaphthylene	78	71	49-121	10	30				
Anthracene	82	72	52-126	13	30				
Benzo(a)anthracene	83	72	32-135	15	30				
Benzo(a)pyrene	76	66	36-138	14	30				
Benzo(b)fluoranthene	88	80	26-142	9	30				
Benzo(e)pyrene	82	69*	70-130	17	30				
Benzo(g,h,i)perylene	72	60	33-141	19	30				
Benzo(k)fluoranthene	82	66	47-129	22	30				
Butylbenzylphthalate	96	81	59-153	17	30				
Di-n-butylphthalate	92	82	62-154	11	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chrysene	76	67	29-148	12	30				
Dibenz(a,h)anthracene	72	62	34-125	16	30				
Diethylphthalate	67*	71*	76-127	6	30				
Dimethylphthalate	65	67	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	102	76	39-167	24	30				
Fluoranthene	82	70	47-135	15	30				
Fluorene	94	72	50-129	26	30				
Indeno(1,2,3-cd)pyrene	71	60	17-136	17	30				
1-Methylnaphthalene	86	75	50-131	14	30				
2-Methylnaphthalene	87	75	28-144	14	30				
Naphthalene	81	69	31-148	16	30				
N-Nitrosodimethylamine	84	76	48-113	10	30				
Di-n-octylphthalate	209*	306*	52-162	29	30				
Phenanthrene	80	68	29-142	15	30				
Pyrene	84	69	26-143	19	30				
Batch number: 131630028A	Sample number(s): 7086819,7086821-7086823 UNSPK: P085556								
EFH (C12-C14)	99	101	49-123	3	20				
EFH (C15-C20)	130*	171*	49-123	28*	20				
EFH (C21-C30)	23*	182*	49-123	59*	20				
EFH (C30-C40)	-32*	276*	49-123	75*	20				
EFH (C8-C11)	83	84	49-123	2	20				
Batch number: 131600637001	Sample number(s): 7086819,7086821-7086823 UNSPK: P081058 BKG: P081058								
Aluminum	1622 (2)	1543 (2)	75-125	1	20	8,890	9,900	11	20
Antimony	81	81	75-125	1	20	0.563 J	4.00 U	200* (1)	20
Arsenic	106	106	75-125	0	20	4.10	4.62	12 (1)	20
Barium	103	108	75-125	4	20	60.2	64.4	7	20
Beryllium	102	103	75-125	1	20	0.397 J	0.443 J	11 (1)	20
Boron	96	98	75-125	2	20	6.05 J	6.15 J	2 (1)	20
Cadmium	98	99	75-125	1	20	0.504 J	0.525 J	4 (1)	20
Calcium	127 (2)	111 (2)	75-125	2	20	2,410	2,290	5	20
Chromium	109	104	75-125	3	20	11.4	13.0	14 (1)	20
Cobalt	97	98	75-125	0	20	3.70	3.89	5 (1)	20
Copper	99	104	75-125	4	20	5.27	5.51	4 (1)	20
Iron	1612 (2)	1351 (2)	75-125	1	20	16,100	17,500	9	20
Lead	101	100	75-125	1	20	7.67	8.60	11 (1)	20
Lithium	105	105	75-125	1	20	21.8	24.4	11	20
Magnesium	353 (2)	374 (2)	75-125	1	20	3,490	3,880	11	20
Manganese	125 (2)	129 (2)	75-125	1	20	239	256	7	20
Molybdenum	98	99	75-125	1	20	0.759 J	0.385 J	65* (1)	20
Nickel	100	99	75-125	1	20	6.70	8.25	21* (1)	20
Phosphorus	103	114	75-125	2	20	378	383	1	20
Potassium	150*	149*	75-125	0	20	2,930	3,180	8	20
Sodium	100	101	75-125	1	20	62.7 J	68.0 J	8 (1)	20
Tin	93	92	75-125	0	20	2.66 J	2.68 J	1 (1)	20
Titanium	441 (2)	406 (2)	75-125	3	20	928	1,040	11	20
Vanadium	104	105	75-125	1	20	24.6	28.0	13	20
Zinc	110	111	75-125	1	20	66.1	71.2	7	20
Zirconium	100	101	75-125	1	20	2.18 J	2.97 J	31* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131600637001A	Sample number(s): 7086819,7086821-7086823 UNSPK: P081058 BKG: P081058								
Silver	97	98	75-125	1	20	0.0317 J	0.200 U	200* (1)	20
Strontium	94	94	75-125	0	20	8.54	8.26	3	20
Thallium	112	107	75-125	3	20	0.198 J	0.229	15 (1)	20
Batch number: 131600637001B	Sample number(s): 7086819,7086821-7086823 UNSPK: P081058 BKG: P081058								
Selenium	107	108	75-125	2	20	0.400 U	0.400 U	0 (1)	20
Batch number: 131600638001	Sample number(s): 7086819,7086821-7086823 UNSPK: P078552 BKG: P078552								
3a Mercury 7471A	98	97	65-135	1	20	0.0117 J	0.0108 J	8 (1)	20
Batch number: 13159039401A	Sample number(s): 7086819,7086821-7086823 BKG: 7086819								
15a pH by 9045D						6.30	6.37	1	3
Batch number: 13163162401A	Sample number(s): 7086819-7086823 BKG: P081058								
14a Moisture Content by 160.3						1.8	1.9	7	20
Batch number: 13165001	Sample number(s): 7086820-7086823 UNSPK: P085556								
2378-TCDD	97	98	40-135	2	20				
12378-PeCDD	100	100	40-135	4	20				
123478-HxCDD	107	108	40-135	3	20				
123678-HxCDD	105	106	40-135	3	20				
123789-HxCDD	106	105	40-135	4	20				
1234678-HpCDD	118	120	40-135	2	20				
OCDD	207*	221*	40-135	3	20				
2378-TCDF	104	103	40-135	4	20				
12378-PeCDF	106	106	40-135	3	20				
23478-PeCDF	105	107	40-135	1	20				
123478-HxCDF	108	108	40-135	3	20				
123678-HxCDF	107	107	40-135	3	20				
123789-HxCDF	108	109	40-135	3	20				
234678-HxCDF	107	107	40-135	3	20				
1234678-HpCDF	110	112	40-135	2	20				
1234789-HpCDF	106	107	40-135	2	20				
OCDF	114	114	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13161SLF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7086819	81	74	94
7086821	88	89	100

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1395738
Reported: 06/21/13 at 03:18 PM

Surrogate Quality Control

7086822	70	69	80
7086823	76	73	86
Blank	88	98	101
LCS	90	99	102
MS	77	74	89
MSD	69	67	79
Limits:	54-129	61-134	55-129

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131630028A

	Chlorobenzene	Orthoterphenyl
7086819	92	98
7086821	92	98
7086822	93	97
7086823	89	95
Blank	99	105
LCS	99	106
MS	101	109
MSD	95	100
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13165001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7086820	71	81	80	85	83	82
7086821	67	73	78	83	80	82
7086822	70	76	50	52	83	82
7086823	71	81	54	53	83	81
Blank	66	75	87	96	89	83
MS	69	77	82	89	87	79
MSD	64	70	78	80	86	78
OPR	59	68	73	83	75	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7086820	97	85	75	80	77	81
7086821	91	91	88	74	78	77
7086822	56	87	82	77	77	77
7086823	61	88	82	80	79	81
Blank	119	78	75	73	80	85
MS	107	69	62	75	80	80
MSD	85	70	68	68	74	75
OPR	99	53	45	66	70	71
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7086820	80	87	87	68	78
7086821	77	84	89	61	71

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Quality Control Summary

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Reported: 06/21/13 at 03:18 PM

Surrogate Quality Control

7086822	80	87	90	66	74
7086823	81	89	92	68	77
Blank	82	86	89	64	78
MS	78	75	76	65	80
MSD	73	70	69	59	69
OPR	70	67	67	57	73
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13168007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7086819	69	76	77	90	80	74
Blank	71	75	79	90	84	74
OPR	60	63	68	82	73	63
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7086819	107	77	73	80	79	84
Blank	127	79	78	82	87	89
OPR	114	67	67	69	76	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7086819	81	89	93	62	78
Blank	87	98	104	64	82
OPR	75	87	95	53	69
Limits:	28-130	23-140	17-157	24-169	24-185

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acct#13013 Ap#1395738 Sample#7086819-23

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/7/2013
CarrierName: FedEx
AirbillNo: 799949968321

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130607-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-827-SA5A-SB-0.0-0.5	6/7/13 11:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-827-SA5A-SB-0.0-0.5	6/7/13 11:45	SO	None	1 - 4 oz glass	10 day														X																		
SL-845-SA5A-SB-0.0-0.5	6/7/13 08:40	SO	None	1 - SS-Sleeve	10 day									X																							
SL-846-SA5A-SB-0.0-0.5	6/7/13 09:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-846-SA5A-SB-0.0-0.5	6/7/13 09:15	SO	None	1 - 4 oz glass	10 day														X																		
SL-847-SA5A-SB-0.0-0.5	6/7/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-847-SA5A-SB-0.0-0.5	6/7/13 09:45	SO	None	1 - 4 oz glass	10 day														X																		
SL-848-SA5A-SB-0.0-0.5	6/7/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-848-SA5A-SB-0.0-0.5	6/7/13 10:15	SO	None	1 - 4 oz glass	10 day														X																		

Special Instructions:

Sampler: V. Gonzales

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	6/7/13	1400									
									Burns/Mc	6.8.13	910

COC Rev 2

COC: 20130607-01, Page 1 of 1

1 of 1

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C# 1395738

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 6.8.13

Time of Receipt: 910

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : YES (NO)

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.6	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 2299 **Date/Time:** 6.8.13 1004

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 21, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/11/2013
Group Number: 1396058
SDG: PH052
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-773-SA5A-SB-0.0-0.5 Soil	7088251
SL-774-SA5A-SB-0.0-0.5 Soil	7088252
SL-774-SA5A-SB-0.0-0.5MS Soil	7088253
SL-774-SA5A-SB-0.0-0.5MSD Soil	7088254
SL-774-SA5A-SB-0.0-0.5DUP Soil	7088255
SL-1174-SA5A-SB-0.0-0.5 Soil	7088256
SL-776-SA5A-SB-0.0-0.5 Soil	7088257
SL-776-SA5A-SB-6.0-7.0 Soil	7088258
SL-776-SA5A-SB-6.0-7.0MS Soil	7088259
SL-776-SA5A-SB-6.0-7.0MSD Soil	7088260
SL-776-SA5A-SB-6.0-7.0DUP Soil	7088261
SL-1176-SA5A-SB-6.0-7.0 Soil	7088262

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.92	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	3.2		1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	3.8		1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	9.2		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	5.2	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	3.4		1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	2.6		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	9.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	0.88	J	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3	J	18	6.0	1
12969	Fluoranthene	206-44-0	11		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.5		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	0.69	J	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	0.97	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.2	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	100		18	6.0	1
12969	Phenanthrene	85-01-8	5.3		1.7	0.67	1
12969	Pyrene	129-00-0	9.6		1.7	0.67	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	1.4	1
10590	p,p-DDT	50-29-3	1.2	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	0.49	J	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	9.8		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	38		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	28		10	4.1	1
12952	EFH (C8-C11)	n.a.	17		5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		39.9	7.69	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.499	1
06935	Arsenic	7440-38-2	3.84	J	3.99	0.329	1
06946	Barium	7440-39-3	94.4		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.675	J	0.997	0.0668	1
07914	Boron	7440-42-8	4.57	J	9.97	0.828	1
06949	Cadmium	7440-43-9	0.529	J	0.997	0.0329	1
01650	Calcium	7440-70-2	1,700		19.9	4.01	1
06951	Chromium	7440-47-3	21.4		2.99	0.0878	1
06952	Cobalt	7440-48-4	6.44		0.997	0.0898	1
06953	Copper	7440-50-8	19.9	U	19.9	1.80	10
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	20,900		39.9	3.79	1
06955	Lead	7439-92-1	12.7		2.99	0.469	1
01656	Lithium	7439-93-2	19.1		4.0	0.55	1
01657	Magnesium	7439-95-4	3,720		9.97	1.73	1
06958	Manganese	7439-96-5	291		0.997	0.0828	1
06960	Molybdenum	7439-98-7	1.05	J	1.99	0.170	1
06961	Nickel	7440-02-0	12.6		1.99	0.110	1
10145	Phosphorus	7723-14-0	187		9.97	0.509	1
01662	Potassium	7440-09-7	2,180		99.7	13.5	1
01667	Sodium	7440-23-5	180		99.7	16.7	1
06969	Tin	7440-31-5	2.85	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,340		0.997	0.170	1
06971	Vanadium	7440-62-2	39.5		0.997	0.110	1
06972	Zinc	7440-66-6	40.5		3.99	0.199	1
10146	Zirconium	7440-67-7	2.35	J	4.99	0.828	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.186	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.0674	J	0.199	0.0199	2
06144	Strontium	7440-24-6	20.5		0.399	0.0339	2
06145	Thallium	7440-28-0	0.321		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0187		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.68		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	1.7	0.10	0.10	1

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

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0534	JBQ	1.01	0.0301	1
11031	12378-PeCDD	40321-76-4	0.613	JB	5.03	0.0437	1
11031	123478-HxCDD	39227-28-6	0.897	JB	5.03	0.0418	1
11031	123678-HxCDD	57653-85-7	2.37	JB	5.03	0.0443	1
11031	123789-HxCDD	19408-74-3	1.85	JB	5.03	0.0395	1
11031	1234678-HpCDD	35822-46-9	63.7	B	5.03	0.0642	1
11031	OCDD	3268-87-9	651	B	10.1	0.0391	1
11031	2378-TCDF	51207-31-9	0.208	JB	1.01	0.0456	1
11031	12378-PeCDF	57117-41-6	0.335	JB	5.03	0.0270	1
11031	23478-PeCDF	57117-31-4	0.311	JB	5.03	0.0255	1
11031	123478-HxCDF	70648-26-9	0.629	JB	5.03	0.0243	1
11031	123678-HxCDF	57117-44-9	0.413	JB	5.03	0.0230	1
11031	123789-HxCDF	72918-21-9	5.03	U	5.03	0.0269	1
11031	234678-HxCDF	60851-34-5	0.454	JB	5.03	0.0245	1
11031	1234678-HpCDF	67562-39-4	8.12	B	5.03	0.0191	1
11031	1234789-HpCDF	55673-89-7	0.660	JB	5.03	0.0277	1
11031	OCDF	39001-02-0	19.2	B	10.1	0.0276	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.32				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLE026	06/20/2013 05:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLE026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 16:39	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 18:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 20:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	2	131640637004	06/21/2013 10:36	Joanne M Gates	10
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:28	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:55	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:55	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:55	Choon Y Tian	2

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

Sample Description: SL-773-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088251
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:35 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

733-0 SDG#: PH052-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:55	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 16:55	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401A	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	190		18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1

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

Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	3.0	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	6.8	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,300		40.0	7.71	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.500	1
06935	Arsenic	7440-38-2	4.42		4.00	0.330	1
06946	Barium	7440-39-3	108		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.812	J	1.00	0.0670	1
07914	Boron	7440-42-8	4.91	J	10.0	0.830	1
06949	Cadmium	7440-43-9	0.511	J	1.00	0.0330	1
01650	Calcium	7440-70-2	1,800		20.0	4.02	1
06951	Chromium	7440-47-3	22.1		3.00	0.0880	1
06952	Cobalt	7440-48-4	6.52		1.00	0.0900	1
06953	Copper	7440-50-8	20.0	U	20.0	1.80	10
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	22,100		40.0	3.80	1
06955	Lead	7439-92-1	6.50		3.00	0.470	1
01656	Lithium	7439-93-2	22.6		4.0	0.55	1
01657	Magnesium	7439-95-4	3,820		10.0	1.73	1
06958	Manganese	7439-96-5	275		1.00	0.0830	1
06960	Molybdenum	7439-98-7	1.62	J	2.00	0.170	1
06961	Nickel	7440-02-0	14.2		2.00	0.110	1
10145	Phosphorus	7723-14-0	217		10.0	0.510	1
01662	Potassium	7440-09-7	2,170		100	13.5	1
01667	Sodium	7440-23-5	99.1	J	100	16.7	1
06969	Tin	7440-31-5	3.09	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,310		1.00	0.170	1
06971	Vanadium	7440-62-2	41.3		1.00	0.110	1
06972	Zinc	7440-66-6	42.4		4.00	0.200	1
10146	Zirconium	7440-67-7	2.25	J	5.00	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.156	J	0.400	0.100	2
06142	Silver	7440-22-4	0.0444	J	0.200	0.0200	2
06144	Strontium	7440-24-6	22.6		0.400	0.0340	2
06145	Thallium	7440-28-0	0.261		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0125	J	0.0164	0.0099	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.	n.a.	6.33	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.0	0.10	0.10	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0253	1
11031	12378-PeCDD	40321-76-4	0.142	JBQ	5.09	0.0293	1
11031	123478-HxCDD	39227-28-6	0.131	JBQ	5.09	0.0256	1
11031	123678-HxCDD	57653-85-7	0.453	JB	5.09	0.0268	1
11031	123789-HxCDD	19408-74-3	0.548	JB	5.09	0.0252	1
11031	1234678-HpCDD	35822-46-9	5.55	B	5.09	0.0305	1
11031	OCDD	3268-87-9	64.9	B	10.2	0.0268	1
11031	2378-TCDF	51207-31-9	0.0306	JBQ	1.02	0.0230	1
11031	12378-PeCDF	57117-41-6	0.171	JB	5.09	0.0177	1
11031	23478-PeCDF	57117-31-4	0.0936	JBQ	5.09	0.0166	1
11031	123478-HxCDF	70648-26-9	0.117	JBQ	5.09	0.0151	1
11031	123678-HxCDF	57117-44-9	0.109	JBQ	5.09	0.0133	1
11031	123789-HxCDF	72918-21-9	0.284	JB	5.09	0.0166	1
11031	234678-HxCDF	60851-34-5	0.0807	JBQ	5.09	0.0141	1
11031	1234678-HpCDF	67562-39-4	0.762	JB	5.09	0.0104	1
11031	1234789-HpCDF	55673-89-7	0.0922	JBQ	5.09	0.0157	1
11031	OCDF	39001-02-0	2.08	JB	10.2	0.0277	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.217				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13171SLC026	06/21/2013 05:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13171SLC026	06/20/2013 17:45	Sally L Appleyard	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 16:54	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 16:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
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11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	2	131640637004	06/21/2013 10:14	Joanne M Gates	10
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:05	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:37	Choon Y Tian	2

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

Sample Description: SL-774-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088252
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 16:57	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401A	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088253
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33		1.7	0.68	1
12969	Acenaphthylene	208-96-8	37		1.7	0.34	1
12969	Anthracene	120-12-7	34		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	32		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	30		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	35		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	28		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	28		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	31		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	41		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	38		18	6.1	1
12969	Chrysene	218-01-9	32		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	30		1.7	0.68	1
12969	Diethylphthalate	84-66-2	29		18	6.1	1
12969	Dimethylphthalate	131-11-3	34		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		18	6.1	1
12969	Fluoranthene	206-44-0	33		1.7	0.68	1
12969	Fluorene	86-73-7	32		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	30		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	32		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	32		1.7	0.68	1
12969	Naphthalene	91-20-3	32		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	160		18	6.1	1
12969	Phenanthrene	85-01-8	32		1.7	0.68	1
12969	Pyrene	129-00-0	33		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.3		0.85	0.17	1
10590	Alpha BHC	319-84-6	3.4		0.85	0.17	1
10590	Beta BHC	319-85-7	3.4		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.5		0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	7.0		1.7	0.34	1
10590	p,p-DDE	72-55-9	7.0		1.7	0.34	1
10590	p,p-DDT	50-29-3	7.7		1.7	0.36	1
10590	Delta BHC	319-86-8	3.5		0.85	0.46	1
10590	Dieldrin	60-57-1	7.2		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.3		0.85	0.22	1
10590	Endosulfan II	33213-65-9	6.7		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	6.9		1.7	0.34	1
10590	Endrin	72-20-8	7.2		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.6		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	6.7		1.8	0.61	1
10590	Heptachlor	76-44-8	3.3		0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.85	0.17	1
10590	Methoxychlor	72-43-5	37		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088253
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.8	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	9.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,500		40.0	7.71	1
06944	Antimony	7440-36-0	29.7		4.00	0.500	1
06935	Arsenic	7440-38-2	18.6		4.00	0.330	1
06946	Barium	7440-39-3	308		1.00	0.0330	1
06947	Beryllium	7440-41-7	5.86		1.00	0.0670	1
07914	Boron	7440-42-8	200		10.0	0.830	1
06949	Cadmium	7440-43-9	5.19		1.00	0.0330	1
01650	Calcium	7440-70-2	2,380		20.0	4.02	1
06951	Chromium	7440-47-3	44.2		3.00	0.0880	1
06952	Cobalt	7440-48-4	53.2		1.00	0.0900	1
06953	Copper	7440-50-8	8.41	J	20.0	1.80	10
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	23,000		40.0	3.80	1
06955	Lead	7439-92-1	20.9		3.00	0.470	1
01656	Lithium	7439-93-2	123		4.0	0.55	1
01657	Magnesium	7439-95-4	4,180		10.0	1.73	1
06958	Manganese	7439-96-5	341		1.00	0.0830	1
06960	Molybdenum	7439-98-7	192		2.00	0.170	1
06961	Nickel	7440-02-0	63.1		2.00	0.110	1
10145	Phosphorus	7723-14-0	315		10.0	0.510	1
01662	Potassium	7440-09-7	3,590		100	13.5	1
01667	Sodium	7440-23-5	1,080		100	16.7	1
06969	Tin	7440-31-5	363		10.0	0.220	1
06970	Titanium	7440-32-6	1,670		1.00	0.170	1
06971	Vanadium	7440-62-2	96.1		1.00	0.110	1
06972	Zinc	7440-66-6	92.0		4.00	0.200	1
10146	Zirconium	7440-67-7	96.5		5.00	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	3.10		0.400	0.100	2
06142	Silver	7440-22-4	15.2		0.200	0.0200	2
06144	Strontium	7440-24-6	46.7		0.400	0.0340	2
06145	Thallium	7440-28-0	0.985		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.170		0.0167	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088253
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.1	B	1.01	0.0388	1
11031	12378-PeCDD	40321-76-4	100	B	5.03	0.0399	1
11031	123478-HxCDD	39227-28-6	105	B	5.03	0.0506	1
11031	123678-HxCDD	57653-85-7	104	B	5.03	0.0547	1
11031	123789-HxCDD	19408-74-3	105	B	5.03	0.0507	1
11031	1234678-HpCDD	35822-46-9	121	B	5.03	0.0573	1
11031	OCDD	3268-87-9	433	B	10.1	0.0347	1
11031	2378-TCDF	51207-31-9	19.6	B	1.01	0.0339	1
11031	12378-PeCDF	57117-41-6	101	B	5.03	0.0301	1
11031	23478-PeCDF	57117-31-4	101	B	5.03	0.0300	1
11031	123478-HxCDF	70648-26-9	105	B	5.03	0.0377	1
11031	123678-HxCDF	57117-44-9	102	B	5.03	0.0335	1
11031	123789-HxCDF	72918-21-9	102	B	5.03	0.0407	1
11031	234678-HxCDF	60851-34-5	104	B	5.03	0.0355	1
11031	1234678-HpCDF	67562-39-4	106	B	5.03	0.0248	1
11031	1234789-HpCDF	55673-89-7	102	B	5.03	0.0376	1
11031	OCDF	39001-02-0	205	B	10.1	0.0353	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	107	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088253
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13171SLC026	06/21/2013 05:45	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13171SLC026	06/20/2013 17:45	Sally L Appleyard	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 17:10	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 17:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 22:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	2	131640637004	06/21/2013 10:25	Joanne M Gates	10
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:17	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:44	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:44	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:44	Choon Y Tian	2

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088253
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:44	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 17:04	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088254
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	33		1.7	0.68	1
12969	Acenaphthylene	208-96-8	38		1.7	0.34	1
12969	Anthracene	120-12-7	35		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	33		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	31		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	35		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	29		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	30		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	42		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	39		18	6.1	1
12969	Chrysene	218-01-9	32		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	33		1.7	0.68	1
12969	Diethylphthalate	84-66-2	39		18	6.1	1
12969	Dimethylphthalate	131-11-3	34		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.1	1
12969	Fluoranthene	206-44-0	33		1.7	0.68	1
12969	Fluorene	86-73-7	32		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	33		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	32		1.7	0.68	1
12969	Naphthalene	91-20-3	32		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	34		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	44		18	6.1	1
12969	Phenanthrene	85-01-8	32		1.7	0.68	1
12969	Pyrene	129-00-0	32		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.4		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.5		0.84	0.17	1
10590	Beta BHC	319-85-7	3.4		1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	3.5		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	7.1		1.7	0.33	1
10590	p,p-DDE	72-55-9	7.1		1.7	0.33	1
10590	p,p-DDT	50-29-3	7.9		1.7	0.35	1
10590	Delta BHC	319-86-8	3.4		0.84	0.46	1
10590	Dieldrin	60-57-1	7.4		1.7	0.33	1
10590	Endosulfan I	959-98-8	3.4		0.84	0.22	1
10590	Endosulfan II	33213-65-9	6.9		1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	7.1		1.7	0.33	1
10590	Endrin	72-20-8	7.3		1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	6.8		1.7	0.33	1
10590	Endrin Ketone	53494-70-5	6.8		1.8	0.61	1
10590	Heptachlor	76-44-8	3.3		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.84	0.17	1
10590	Methoxychlor	72-43-5	38		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088254
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	4.6	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	17		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	31		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,000		40.0	7.71	1
06944	Antimony	7440-36-0	29.4		4.00	0.500	1
06935	Arsenic	7440-38-2	18.2		4.00	0.330	1
06946	Barium	7440-39-3	303		1.00	0.0330	1
06947	Beryllium	7440-41-7	5.86		1.00	0.0670	1
07914	Boron	7440-42-8	198		10.0	0.830	1
06949	Cadmium	7440-43-9	5.20		1.00	0.0330	1
01650	Calcium	7440-70-2	2,340		20.0	4.02	1
06951	Chromium	7440-47-3	43.3		3.00	0.0880	1
06952	Cobalt	7440-48-4	53.4		1.00	0.0900	1
06953	Copper	7440-50-8	12.6	J	20.0	1.80	10
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	22,600		40.0	3.80	1
06955	Lead	7439-92-1	20.7		3.00	0.470	1
01656	Lithium	7439-93-2	122		4.0	0.55	1
01657	Magnesium	7439-95-4	4,110		10.0	1.73	1
06958	Manganese	7439-96-5	340		1.00	0.0830	1
06960	Molybdenum	7439-98-7	192		2.00	0.170	1
06961	Nickel	7440-02-0	62.5		2.00	0.110	1
10145	Phosphorus	7723-14-0	314		10.0	0.510	1
01662	Potassium	7440-09-7	3,530		100	13.5	1
01667	Sodium	7440-23-5	1,070		100	16.7	1
06969	Tin	7440-31-5	361		10.0	0.220	1
06970	Titanium	7440-32-6	1,620		1.00	0.170	1
06971	Vanadium	7440-62-2	94.7		1.00	0.110	1
06972	Zinc	7440-66-6	91.5		4.00	0.200	1
10146	Zirconium	7440-67-7	94.9		5.00	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.23		0.400	0.100	2
06142	Silver	7440-22-4	11.2		0.200	0.0200	2
06144	Strontium	7440-24-6	32.0		0.400	0.0340	2
06145	Thallium	7440-28-0	0.740		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.167		0.0163	0.0098	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088254
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.7	B	0.996	0.0416	1
11031	12378-PeCDD	40321-76-4	96.8	B	4.98	0.0466	1
11031	123478-HxCDD	39227-28-6	103	B	4.98	0.0378	1
11031	123678-HxCDD	57653-85-7	102	B	4.98	0.0393	1
11031	123789-HxCDD	19408-74-3	102	B	4.98	0.0391	1
11031	1234678-HpCDD	35822-46-9	100	B	4.98	0.0478	1
11031	OCDD	3268-87-9	213	B	9.96	0.0396	1
11031	2378-TCDF	51207-31-9	19.6	B	0.996	0.0422	1
11031	12378-PeCDF	57117-41-6	100	B	4.98	0.0362	1
11031	23478-PeCDF	57117-31-4	101	B	4.98	0.0362	1
11031	123478-HxCDF	70648-26-9	102	B	4.98	0.0403	1
11031	123678-HxCDF	57117-44-9	101	B	4.98	0.0347	1
11031	123789-HxCDF	72918-21-9	102	B	4.98	0.0442	1
11031	234678-HxCDF	60851-34-5	99.6	B	4.98	0.0354	1
11031	1234678-HpCDF	67562-39-4	101	B	4.98	0.0306	1
11031	1234789-HpCDF	55673-89-7	101	B	4.98	0.0490	1
11031	OCDF	39001-02-0	197	B	9.96	0.0407	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088254
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13171SLC026	06/21/2013 06:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13171SLC026	06/20/2013 17:45	Sally L Appleyard	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 17:25	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 17:30	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/20/2013 23:41	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	2	131640637004	06/21/2013 10:29	Joanne M Gates	10
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:21	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:46	Choon Y Tian	2

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

Sample Description: SL-774-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088254
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 17:06	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-774-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088255
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	23,600		40.0	7.71	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.500	1
06935	Arsenic	7440-38-2	4.82		4.00	0.330	1
06946	Barium	7440-39-3	106		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.805	J	1.00	0.0670	1
07914	Boron	7440-42-8	4.98	J	10.0	0.830	1
06949	Cadmium	7440-43-9	0.463	J	1.00	0.0330	1
01650	Calcium	7440-70-2	1,730		20.0	4.02	1
06951	Chromium	7440-47-3	21.9		3.00	0.0880	1
06952	Cobalt	7440-48-4	6.66		1.00	0.0900	1
06953	Copper	7440-50-8	20.0	U	20.0	1.80	10
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	21,900		40.0	3.80	1
06955	Lead	7439-92-1	6.47		3.00	0.470	1
01656	Lithium	7439-93-2	22.4		4.0	0.55	1
01657	Magnesium	7439-95-4	3,740		10.0	1.73	1
06958	Manganese	7439-96-5	283		1.00	0.0830	1
06960	Molybdenum	7439-98-7	1.02	J	2.00	0.170	1
06961	Nickel	7440-02-0	13.9		2.00	0.110	1
10145	Phosphorus	7723-14-0	214		10.0	0.510	1
01662	Potassium	7440-09-7	2,120		100	13.5	1
01667	Sodium	7440-23-5	97.2	J	100	16.7	1
06969	Tin	7440-31-5	3.10	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,310		1.00	0.170	1
06971	Vanadium	7440-62-2	41.4		1.00	0.110	1
06972	Zinc	7440-66-6	41.1		4.00	0.200	1
10146	Zirconium	7440-67-7	2.86	J	5.00	0.830	1
	SW-846 6020A		mg/kg		mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.211	J	0.400	0.100	2
06142	Silver	7440-22-4	0.0680	J	0.200	0.0200	2
06144	Strontium	7440-24-6	26.0		0.400	0.0340	2
06145	Thallium	7440-28-0	0.328		0.200	0.0300	2
	SW-846 7471B		mg/kg		mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.0124	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		Std. Units		Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	6.40		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11625	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-774-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088255
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 09:55 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

734-0 SDG#: PH052-02DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	2	131640637004	06/21/2013 10:21	Joanne M Gates	10
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:13	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:41	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 17:02	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401A	06/11/2013 17:20	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.61	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	54		19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.34	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.4	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,600		41.1	7.91	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.513	1
06935	Arsenic	7440-38-2	3.81	J	4.11	0.339	1
06946	Barium	7440-39-3	105		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.641	J	1.03	0.0688	1
07914	Boron	7440-42-8	4.55	J	10.3	0.852	1
06949	Cadmium	7440-43-9	0.561	J	1.03	0.0339	1
01650	Calcium	7440-70-2	1,710		20.5	4.13	1
06951	Chromium	7440-47-3	19.6		3.08	0.0903	1
06952	Cobalt	7440-48-4	6.18		1.03	0.0924	1
06953	Copper	7440-50-8	10.3	U	10.3	0.924	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	20,200		41.1	3.90	1
06955	Lead	7439-92-1	6.83		3.08	0.482	1
01656	Lithium	7439-93-2	19.2		4.1	0.56	1
01657	Magnesium	7439-95-4	3,640		10.3	1.78	1
06958	Manganese	7439-96-5	346		1.03	0.0852	1
06960	Molybdenum	7439-98-7	0.860	J	2.05	0.175	1
06961	Nickel	7440-02-0	13.0		2.05	0.113	1
10145	Phosphorus	7723-14-0	259		10.3	0.524	1
01662	Potassium	7440-09-7	3,340		103	13.9	1
01667	Sodium	7440-23-5	85.0	J	103	17.1	1
06969	Tin	7440-31-5	2.87	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,310		1.03	0.175	1
06971	Vanadium	7440-62-2	36.4		1.03	0.113	1
06972	Zinc	7440-66-6	45.4		4.11	0.205	1
10146	Zirconium	7440-67-7	1.28	J	5.13	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.197	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0459	J	0.205	0.0205	2
06144	Strontium	7440-24-6	24.3		0.411	0.0349	2
06145	Thallium	7440-28-0	0.277		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0114	J	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.62		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.5	0.10	0.10	1

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

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0501 JBQ	1.03	0.0242	1
11031	12378-PeCDD	40321-76-4	0.225 JBQ	5.15	0.0310	1
11031	123478-HxCDD	39227-28-6	0.0762 JBQ	5.15	0.0231	1
11031	123678-HxCDD	57653-85-7	0.197 JB	5.15	0.0243	1
11031	123789-HxCDD	19408-74-3	0.319 JBQ	5.15	0.0226	1
11031	1234678-HpCDD	35822-46-9	0.690 JB	5.15	0.0258	1
11031	OCDD	3268-87-9	7.33 JB	10.3	0.0268	1
11031	2378-TCDF	51207-31-9	0.0391 JBQ	1.03	0.0214	1
11031	12378-PeCDF	57117-41-6	0.214 JBQ	5.15	0.0175	1
11031	23478-PeCDF	57117-31-4	0.109 JBQ	5.15	0.0172	1
11031	123478-HxCDF	70648-26-9	0.0823 JB	5.15	0.0127	1
11031	123678-HxCDF	57117-44-9	0.116 JBQ	5.15	0.0116	1
11031	123789-HxCDF	72918-21-9	0.202 JBQ	5.15	0.0139	1
11031	234678-HxCDF	60851-34-5	0.0798 JB	5.15	0.0125	1
11031	1234678-HpCDF	67562-39-4	0.156 JB	5.15	0.00921	1
11031	1234789-HpCDF	55673-89-7	0.0515 JBQ	5.15	0.0127	1
11031	OCDF	39001-02-0	0.314 JB	10.3	0.0261	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0467			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	95	32 - 141
13C12-123678-HxCDD	97	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	105	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	102	26 - 123
13C12-234678-HxCDF	94	28 - 136
13C12-123789-HxCDF	95	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLE026	06/20/2013 06:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLE026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 17:40	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 17:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/21/2013 00:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131640637004	06/20/2013 01:25	John W Yanzuk II	5
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:32	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 08:58	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 08:58	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 08:58	Choon Y Tian	2

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

Sample Description: SL-1174-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088256
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:10 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11740 SDG#: PH052-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 08:58	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 17:08	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401A	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.5	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	110		18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	56		18	6.0	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.67	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	0.52	J	1.7	0.33	1
10590	p,p-DDT	50-29-3	0.82	J	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	3.0	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		40.3	7.77	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.504	1
06935	Arsenic	7440-38-2	4.10		4.03	0.332	1
06946	Barium	7440-39-3	96.0		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.580	J	1.01	0.0675	1
07914	Boron	7440-42-8	4.26	J	10.1	0.836	1
06949	Cadmium	7440-43-9	0.508	J	1.01	0.0332	1
01650	Calcium	7440-70-2	1,580		20.1	4.05	1
06951	Chromium	7440-47-3	19.4		3.02	0.0886	1
06952	Cobalt	7440-48-4	6.01		1.01	0.0906	1
06953	Copper	7440-50-8	10.1	U	10.1	0.906	5
	Reporting limits were raised due to interference from the sample matrix.						
01654	Iron	7439-89-6	19,000		40.3	3.83	1
06955	Lead	7439-92-1	5.60		3.02	0.473	1
01656	Lithium	7439-93-2	16.7		4.0	0.55	1
01657	Magnesium	7439-95-4	3,460		10.1	1.74	1
06958	Manganese	7439-96-5	314		1.01	0.0836	1
06960	Molybdenum	7439-98-7	0.619	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.8		2.01	0.111	1
10145	Phosphorus	7723-14-0	185		10.1	0.514	1
01662	Potassium	7440-09-7	2,710		101	13.6	1
01667	Sodium	7440-23-5	106		101	16.8	1
06969	Tin	7440-31-5	2.61	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,290		1.01	0.171	1
06971	Vanadium	7440-62-2	35.9		1.01	0.111	1
06972	Zinc	7440-66-6	41.9		4.03	0.201	1
10146	Zirconium	7440-67-7	1.48	J	5.04	0.836	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.195	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0256	J	0.201	0.0201	2
06144	Strontium	7440-24-6	24.3		0.403	0.0342	2
06145	Thallium	7440-28-0	0.302		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.04		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	1.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.103	JBQ	0.994	0.0222	1
11031	12378-PeCDD	40321-76-4	0.376	JB	4.97	0.0296	1
11031	123478-HxCDD	39227-28-6	0.268	JB	4.97	0.0277	1
11031	123678-HxCDD	57653-85-7	0.847	JB	4.97	0.0302	1
11031	123789-HxCDD	19408-74-3	1.12	JB	4.97	0.0293	1
11031	1234678-HpCDD	35822-46-9	9.30	B	4.97	0.0341	1
11031	OCDD	3268-87-9	107	B	9.94	0.0253	1
11031	2378-TCDF	51207-31-9	0.0858	JB	0.994	0.0275	1
11031	12378-PeCDF	57117-41-6	0.370	JB	4.97	0.0199	1
11031	23478-PeCDF	57117-31-4	0.273	JB	4.97	0.0188	1
11031	123478-HxCDF	70648-26-9	0.226	JB	4.97	0.0182	1
11031	123678-HxCDF	57117-44-9	0.231	JB	4.97	0.0174	1
11031	123789-HxCDF	72918-21-9	0.249	JB	4.97	0.0208	1
11031	234678-HxCDF	60851-34-5	0.204	JBQ	4.97	0.0171	1
11031	1234678-HpCDF	67562-39-4	1.44	JB	4.97	0.0115	1
11031	1234789-HpCDF	55673-89-7	0.128	JBQ	4.97	0.0169	1
11031	OCDF	39001-02-0	3.16	JB	9.94	0.0243	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.912				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLE026	06/20/2013 06:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLE026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650002A	06/20/2013 17:56	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650002A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131640006A	06/15/2013 18:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131640006A	06/13/2013 17:30	Nicholas W Shroyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168007	06/21/2013 06:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168007	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	131640637004	06/20/2013 01:29	John W Yanzuk II	5
01654	Iron	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	131640637004	06/19/2013 20:43	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	131640637004B	06/19/2013 09:00	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637004A	06/19/2013 09:00	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637004A	06/19/2013 09:00	Choon Y Tian	2

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

Sample Description: SL-776-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088257
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 10:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-0 SDG#: PH052-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637004A	06/19/2013 09:00	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638004	06/17/2013 17:10	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637004	06/16/2013 21:38	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638004	06/17/2013 02:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401A	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401A	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	0.79	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.66	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
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776-6 SDG#: PH052-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		41.7	8.03	1
06944	Antimony	7440-36-0	0.735	J	4.17	0.521	1
06935	Arsenic	7440-38-2	6.93		4.17	0.344	1
06946	Barium	7440-39-3	58.2		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.716	J	1.04	0.0698	1
07914	Boron	7440-42-8	2.53	J	10.4	0.865	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0344	1
01650	Calcium	7440-70-2	1,620		20.8	4.19	1
06951	Chromium	7440-47-3	21.1		3.13	0.0917	1
06952	Cobalt	7440-48-4	3.30		1.04	0.0938	1
06953	Copper	7440-50-8	8.65		2.08	0.188	1
01654	Iron	7439-89-6	23,400		41.7	3.96	1
06955	Lead	7439-92-1	6.39		3.13	0.490	1
01656	Lithium	7439-93-2	22.9		4.2	0.57	1
01657	Magnesium	7439-95-4	4,560		10.4	1.80	1
06958	Manganese	7439-96-5	130		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.339	J	2.08	0.177	1
06961	Nickel	7440-02-0	8.79		2.08	0.115	1
10145	Phosphorus	7723-14-0	115		10.4	0.531	1
01662	Potassium	7440-09-7	1,520		104	14.1	1
01667	Sodium	7440-23-5	895		104	17.4	1
06969	Tin	7440-31-5	3.12	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,090		1.04	0.177	1
06971	Vanadium	7440-62-2	37.8		1.04	0.115	1
06972	Zinc	7440-66-6	41.8		4.17	0.208	1
10146	Zirconium	7440-67-7	3.14	J	5.21	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.0319	J	0.208	0.0208	2
06144	Strontium	7440-24-6	18.8		0.417	0.0354	2
06145	Thallium	7440-28-0	0.263		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.86		0.0100	0.0100	1

The pH was measured in water at 22.8 C.

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

Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
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776-6 SDG#: PH052-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07 U	1.07	0.0273	1
11031	12378-PeCDD	40321-76-4	0.0362 JBQ	5.34	0.0310	1
11031	123478-HxCDD	39227-28-6	5.34 U	5.34	0.0174	1
11031	123678-HxCDD	57653-85-7	0.0456 JBQ	5.34	0.0185	1
11031	123789-HxCDD	19408-74-3	0.0464 JBQ	5.34	0.0179	1
11031	1234678-HpCDD	35822-46-9	0.0947 JB	5.34	0.0216	1
11031	OCDD	3268-87-9	0.441 JB	10.7	0.0261	1
11031	2378-TCDF	51207-31-9	1.07 U	1.07	0.0240	1
11031	12378-PeCDF	57117-41-6	0.0239 JBQ	5.34	0.0185	1
11031	23478-PeCDF	57117-31-4	5.34 U	5.34	0.0176	1
11031	123478-HxCDF	70648-26-9	0.0481 JBQ	5.34	0.00955	1
11031	123678-HxCDF	57117-44-9	0.0260 JBQ	5.34	0.00815	1
11031	123789-HxCDF	72918-21-9	0.0405 JBQ	5.34	0.0111	1
11031	234678-HxCDF	60851-34-5	0.0315 JBQ	5.34	0.00901	1
11031	1234678-HpCDF	67562-39-4	0.0482 JB	5.34	0.00590	1
11031	1234789-HpCDF	55673-89-7	0.0203 JB	5.34	0.00901	1
11031	OCDF	39001-02-0	0.131 JB	10.7	0.0290	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00172			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

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CDM Federal Programs Corp.
3201 Jermantown Road
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776-6 SDG#: PH052-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-776-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088258
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

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776-6 SDG#: PH052-05BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLG026	06/20/2013 07:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLG026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 17:46	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 12:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 07:22	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 14:34	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 17:59	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 17:59	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 17:59	David K Beck	2

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776-6 SDG#: PH052-05BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 17:59	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:32	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401B	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088259
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	29		1.8	0.72	1
12969	Acenaphthylene	208-96-8	29		1.8	0.36	1
12969	Anthracene	120-12-7	30		1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	29		1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	33		1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	33		18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	22		1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	18	J	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	26		19	6.4	1
12969	Chrysene	218-01-9	28		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	19		1.8	0.72	1
12969	Diethylphthalate	84-66-2	23		19	6.4	1
12969	Dimethylphthalate	131-11-3	30		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	26		19	6.4	1
12969	Fluoranthene	206-44-0	29		1.8	0.72	1
12969	Fluorene	86-73-7	31		1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	21		1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	30		1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	30		1.8	0.72	1
12969	Naphthalene	91-20-3	29		1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	29		19	6.4	1
12969	Phenanthrene	85-01-8	29		1.8	0.72	1
12969	Pyrene	129-00-0	29		1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	2.7		0.89	0.18	1
10590	Alpha BHC	319-84-6	3.0		0.89	0.18	1
10590	Beta BHC	319-85-7	3.2		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	3.2		0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	7.7		1.8	0.35	1
10590	p,p-DDE	72-55-9	5.9		1.8	0.35	1
10590	p,p-DDT	50-29-3	9.3		1.8	0.37	1
10590	Delta BHC	319-86-8	3.0		0.89	0.48	1
10590	Dieldrin	60-57-1	6.7		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.0		0.89	0.24	1
10590	Endosulfan II	33213-65-9	6.4		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	6.3		1.8	0.35	1
10590	Endrin	72-20-8	6.5		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	6.6		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	7.3		1.9	0.64	1
10590	Heptachlor	76-44-8	3.3		0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.2		0.89	0.18	1
10590	Methoxychlor	72-43-5	43		7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088259
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.8	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	4.8	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	5.1	J	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,200		41.7	8.03	1
06944	Antimony	7440-36-0	35.4		4.17	0.521	1
06935	Arsenic	7440-38-2	21.4		4.17	0.344	1
06946	Barium	7440-39-3	258		1.04	0.0344	1
06947	Beryllium	7440-41-7	5.93		1.04	0.0698	1
07914	Boron	7440-42-8	198		10.4	0.865	1
06949	Cadmium	7440-43-9	4.22		1.04	0.0344	1
01650	Calcium	7440-70-2	2,130		20.8	4.19	1
06951	Chromium	7440-47-3	42.9		3.13	0.0917	1
06952	Cobalt	7440-48-4	51.1		1.04	0.0938	1
06953	Copper	7440-50-8	34.6		2.08	0.188	1
01654	Iron	7439-89-6	26,900		41.7	3.96	1
06955	Lead	7439-92-1	21.0		3.13	0.490	1
01656	Lithium	7439-93-2	126		4.2	0.57	1
01657	Magnesium	7439-95-4	5,060		10.4	1.80	1
06958	Manganese	7439-96-5	191		1.04	0.0865	1
06960	Molybdenum	7439-98-7	190		2.08	0.177	1
06961	Nickel	7440-02-0	57.4		2.08	0.115	1
10145	Phosphorus	7723-14-0	222		10.4	0.531	1
01662	Potassium	7440-09-7	2,970		104	14.1	1
01667	Sodium	7440-23-5	1,910		104	17.4	1
06969	Tin	7440-31-5	362		10.4	0.229	1
06970	Titanium	7440-32-6	1,360		1.04	0.177	1
06971	Vanadium	7440-62-2	96.6		1.04	0.115	1
06972	Zinc	7440-66-6	94.0		4.17	0.208	1
10146	Zirconium	7440-67-7	105		5.21	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.07		0.417	0.104	2
06142	Silver	7440-22-4	10.6		0.208	0.0208	2
06144	Strontium	7440-24-6	26.6		0.417	0.0354	2
06145	Thallium	7440-28-0	0.619		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.188		0.0174	0.0104	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088259
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.8		1.07	0.0423	1
11031	12378-PeCDD	40321-76-4	105	B	5.35	0.0529	1
11031	123478-HxCDD	39227-28-6	113		5.35	0.0442	1
11031	123678-HxCDD	57653-85-7	109	B	5.35	0.0462	1
11031	123789-HxCDD	19408-74-3	110	B	5.35	0.0426	1
11031	1234678-HpCDD	35822-46-9	108	B	5.35	0.0519	1
11031	OCDD	3268-87-9	217	B	10.7	0.0323	1
11031	2378-TCDF	51207-31-9	20.9		1.07	0.0491	1
11031	12378-PeCDF	57117-41-6	107	B	5.35	0.0425	1
11031	23478-PeCDF	57117-31-4	109	B	5.35	0.0414	1
11031	123478-HxCDF	70648-26-9	110	B	5.35	0.0499	1
11031	123678-HxCDF	57117-44-9	106	B	5.35	0.0460	1
11031	123789-HxCDF	72918-21-9	109	B	5.35	0.0595	1
11031	234678-HxCDF	60851-34-5	112	B	5.35	0.0495	1
11031	1234678-HpCDF	67562-39-4	109	B	5.35	0.0333	1
11031	1234789-HpCDF	55673-89-7	109	B	5.35	0.0489	1
11031	OCDF	39001-02-0	214	B	10.7	0.0384	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088259
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLG026	06/20/2013 07:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLG026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 17:59	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 12:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 08:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 14:49	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:06	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:06	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:06	David K Beck	2

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088259
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:06	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088260
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	32		1.8	0.71	1
12969	Acenaphthylene	208-96-8	31		1.8	0.35	1
12969	Anthracene	120-12-7	32		1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	38		1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	39		1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	45		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	41		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	21		1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	41		1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	36		19	6.4	1
12969	Di-n-butylphthalate	84-74-2	35		19	6.4	1
12969	Chrysene	218-01-9	47		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	27		1.8	0.71	1
12969	Diethylphthalate	84-66-2	29		19	6.4	1
12969	Dimethylphthalate	131-11-3	31		19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	36		19	6.4	1
12969	Fluoranthene	206-44-0	33		1.8	0.71	1
12969	Fluorene	86-73-7	35		1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	25		1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	30		1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	31		1.8	0.71	1
12969	Naphthalene	91-20-3	28		1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	52		19	6.4	1
12969	Phenanthrene	85-01-8	32		1.8	0.71	1
12969	Pyrene	129-00-0	33		1.8	0.71	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.1		0.89	0.18	1
10590	Alpha BHC	319-84-6	3.5		0.89	0.18	1
10590	Beta BHC	319-85-7	3.4		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	3.8		0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	10		1.8	0.35	1
10590	p,p-DDE	72-55-9	6.4		1.8	0.35	1
10590	p,p-DDT	50-29-3	14		1.8	0.37	1
10590	Delta BHC	319-86-8	3.6		0.89	0.48	1
10590	Dieldrin	60-57-1	7.1		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.2		0.89	0.24	1
10590	Endosulfan II	33213-65-9	7.3		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	8.1		1.8	0.35	1
10590	Endrin	72-20-8	7.2		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	7.0		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	8.6		1.9	0.64	1
10590	Heptachlor	76-44-8	5.3		0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.3		0.89	0.18	1
10590	Methoxychlor	72-43-5	86		7.2	1.8	1
10590	Mirex	2385-85-5	1.0	J	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088260
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	27	U	27	11	5
12952	EFH (C15-C20)	n.a.	27	U	27	11	5
12952	EFH (C21-C30)	n.a.	76		27	11	5
12952	EFH (C30-C40)	n.a.	220		54	21	5
12952	EFH (C8-C11)	n.a.	27	U	27	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,800		41.7	8.03	1
06944	Antimony	7440-36-0	34.3		4.17	0.521	1
06935	Arsenic	7440-38-2	21.1		4.17	0.344	1
06946	Barium	7440-39-3	260		1.04	0.0344	1
06947	Beryllium	7440-41-7	5.91		1.04	0.0698	1
07914	Boron	7440-42-8	200		10.4	0.865	1
06949	Cadmium	7440-43-9	4.29		1.04	0.0344	1
01650	Calcium	7440-70-2	2,160		20.8	4.19	1
06951	Chromium	7440-47-3	42.4		3.13	0.0917	1
06952	Cobalt	7440-48-4	51.1		1.04	0.0938	1
06953	Copper	7440-50-8	34.6		2.08	0.188	1
01654	Iron	7439-89-6	23,200		41.7	3.96	1
06955	Lead	7439-92-1	20.0		3.13	0.490	1
01656	Lithium	7439-93-2	125		4.2	0.57	1
01657	Magnesium	7439-95-4	4,900		10.4	1.80	1
06958	Manganese	7439-96-5	182		1.04	0.0865	1
06960	Molybdenum	7439-98-7	190		2.08	0.177	1
06961	Nickel	7440-02-0	57.4		2.08	0.115	1
10145	Phosphorus	7723-14-0	204		10.4	0.531	1
01662	Potassium	7440-09-7	2,880		104	14.1	1
01667	Sodium	7440-23-5	1,880		104	17.4	1
06969	Tin	7440-31-5	361		10.4	0.229	1
06970	Titanium	7440-32-6	1,370		1.04	0.177	1
06971	Vanadium	7440-62-2	91.2		1.04	0.115	1
06972	Zinc	7440-66-6	92.2		4.17	0.208	1
10146	Zirconium	7440-67-7	104		5.21	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.94		0.417	0.104	2
06142	Silver	7440-22-4	10.6		0.208	0.0208	2
06144	Strontium	7440-24-6	26.1		0.417	0.0354	2
06145	Thallium	7440-28-0	0.635		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.193		0.0176	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088260
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.0		1.05	0.0339	1
11031	12378-PeCDD	40321-76-4	104	B	5.24	0.0303	1
11031	123478-HxCDD	39227-28-6	112		5.24	0.0333	1
11031	123678-HxCDD	57653-85-7	106	B	5.24	0.0358	1
11031	123789-HxCDD	19408-74-3	107	B	5.24	0.0339	1
11031	1234678-HpCDD	35822-46-9	107	B	5.24	0.0379	1
11031	OCDD	3268-87-9	233	B	10.5	0.0302	1
11031	2378-TCDF	51207-31-9	20.3		1.05	0.0261	1
11031	12378-PeCDF	57117-41-6	105	B	5.24	0.0226	1
11031	23478-PeCDF	57117-31-4	109	B	5.24	0.0206	1
11031	123478-HxCDF	70648-26-9	110	B	5.24	0.0236	1
11031	123678-HxCDF	57117-44-9	106	B	5.24	0.0221	1
11031	123789-HxCDF	72918-21-9	107	B	5.24	0.0253	1
11031	234678-HxCDF	60851-34-5	107	B	5.24	0.0218	1
11031	1234678-HpCDF	67562-39-4	109	B	5.24	0.0250	1
11031	1234789-HpCDF	55673-89-7	107	B	5.24	0.0278	1
11031	OCDF	39001-02-0	212	B	10.5	0.0277	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	82	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088260
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLG026	06/20/2013 08:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLG026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 18:11	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 13:47	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 09:15	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 14:53	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:08	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:08	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:08	David K Beck	2

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

Sample Description: SL-776-SA5A-SB-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088260
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:08	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-SB-6.0-7.0DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088261
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,700		41.7	8.03	1
06944	Antimony	7440-36-0	0.667	J	4.17	0.521	1
06935	Arsenic	7440-38-2	6.48		4.17	0.344	1
06946	Barium	7440-39-3	56.1		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.718	J	1.04	0.0698	1
07914	Boron	7440-42-8	2.18	J	10.4	0.865	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0344	1
01650	Calcium	7440-70-2	1,620		20.8	4.19	1
06951	Chromium	7440-47-3	20.9		3.13	0.0917	1
06952	Cobalt	7440-48-4	3.20		1.04	0.0938	1
06953	Copper	7440-50-8	8.69		2.08	0.188	1
01654	Iron	7439-89-6	23,700		41.7	3.96	1
06955	Lead	7439-92-1	6.20		3.13	0.490	1
01656	Lithium	7439-93-2	23.8		4.2	0.57	1
01657	Magnesium	7439-95-4	4,630		10.4	1.80	1
06958	Manganese	7439-96-5	134		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.242	J	2.08	0.177	1
06961	Nickel	7440-02-0	8.86		2.08	0.115	1
10145	Phosphorus	7723-14-0	108		10.4	0.531	1
01662	Potassium	7440-09-7	1,580		104	14.1	1
01667	Sodium	7440-23-5	904		104	17.4	1
06969	Tin	7440-31-5	3.09	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,100		1.04	0.177	1
06971	Vanadium	7440-62-2	37.4		1.04	0.115	1
06972	Zinc	7440-66-6	42.4		4.17	0.208	1
10146	Zirconium	7440-67-7	3.10	J	5.21	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.0306	J	0.208	0.0208	2
06144	Strontium	7440-24-6	17.2		0.417	0.0354	2
06145	Thallium	7440-28-0	0.250		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0147	J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.56		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	6.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

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

Sample Description: SL-776-SA5A-SB-6.0-7.0DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088261
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

776-6 SDG#: PH052-05DUP

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 14:45	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:03	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:03	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:03	David K Beck	2
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:03	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401B	06/11/2013 17:20	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.50	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		42.0	8.09	1
06944	Antimony	7440-36-0	0.846	J	4.20	0.525	1
06935	Arsenic	7440-38-2	6.23		4.20	0.346	1
06946	Barium	7440-39-3	53.1		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.671	J	1.05	0.0703	1
07914	Boron	7440-42-8	2.23	J	10.5	0.871	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0346	1
01650	Calcium	7440-70-2	1,630		21.0	4.22	1
06951	Chromium	7440-47-3	21.2		3.15	0.0924	1
06952	Cobalt	7440-48-4	5.01		1.05	0.0945	1
06953	Copper	7440-50-8	9.37		2.10	0.189	1
01654	Iron	7439-89-6	24,000		42.0	3.99	1
06955	Lead	7439-92-1	7.02		3.15	0.493	1
01656	Lithium	7439-93-2	23.5		4.2	0.58	1
01657	Magnesium	7439-95-4	4,690		10.5	1.82	1
06958	Manganese	7439-96-5	171		1.05	0.0871	1
06960	Molybdenum	7439-98-7	0.331	J	2.10	0.178	1
06961	Nickel	7440-02-0	9.26		2.10	0.115	1
10145	Phosphorus	7723-14-0	94.3		10.5	0.535	1
01662	Potassium	7440-09-7	1,830		105	14.2	1
01667	Sodium	7440-23-5	854		105	17.5	1
06969	Tin	7440-31-5	3.14	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,150		1.05	0.178	1
06971	Vanadium	7440-62-2	37.4		1.05	0.115	1
06972	Zinc	7440-66-6	44.8		4.20	0.210	1
10146	Zirconium	7440-67-7	3.14	J	5.25	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.420	U	0.420	0.105	2
06142	Silver	7440-22-4	0.210	U	0.210	0.0210	2
06144	Strontium	7440-24-6	17.0		0.420	0.0357	2
06145	Thallium	7440-28-0	0.288		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.42		0.0100	0.0100	1

The pH was measured in water at 22.5 C.

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	7.5	0.10	0.10	1

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

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07 U	1.07	0.0276	1
11031	12378-PeCDD	40321-76-4	0.0460 JBQ	5.35	0.0309	1
11031	123478-HxCDD	39227-28-6	0.0598 J	5.35	0.0199	1
11031	123678-HxCDD	57653-85-7	0.0413 JBQ	5.35	0.0211	1
11031	123789-HxCDD	19408-74-3	0.0640 JBQ	5.35	0.0210	1
11031	1234678-HpCDD	35822-46-9	0.137 JB	5.35	0.0294	1
11031	OCDD	3268-87-9	0.649 JB	10.7	0.0356	1
11031	2378-TCDF	51207-31-9	0.0313 JQ	1.07	0.0192	1
11031	12378-PeCDF	57117-41-6	0.0593 JBQ	5.35	0.0178	1
11031	23478-PeCDF	57117-31-4	0.0561 JB	5.35	0.0164	1
11031	123478-HxCDF	70648-26-9	0.0443 JB	5.35	0.0108	1
11031	123678-HxCDF	57117-44-9	0.0273 JBQ	5.35	0.00995	1
11031	123789-HxCDF	72918-21-9	0.0568 JB	5.35	0.0117	1
11031	234678-HxCDF	60851-34-5	0.0446 JBQ	5.35	0.00984	1
11031	1234678-HpCDF	67562-39-4	0.0478 JBQ	5.35	0.0107	1
11031	1234789-HpCDF	55673-89-7	0.0450 JBQ	5.35	0.0144	1
11031	OCDF	39001-02-0	0.107 JB	10.7	0.0325	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0346			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	84	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLG026	06/20/2013 08:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLG026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 18:24	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 12:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 10:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:01	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:13	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:13	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:13	David K Beck	2

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

Sample Description: SL-1176-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088262
LLI Group # 1396058
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/21/2013 19:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11760 SDG#: PH052-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:13	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401B	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162401B	06/13/2013 19:36	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13164SLE026	Sample number(s): 7088251,7088256-7088257									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	97		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	99		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	92		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	97		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	97		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	106		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	95		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	100		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	86		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	101		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	97		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	98		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	97		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	109		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		71-120		
Batch number: 13164SLG026	Sample number(s): 7088258-7088260,7088262									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	107		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	105		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	96		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		70-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	111		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	105		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	113		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13171SLC026	Sample number(s): 7088252-7088254									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	93		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	82		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	75		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	89		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	74*		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	112		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	101		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	105		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	109		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	107		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	100		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	107		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	95		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	93		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	101		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	92		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	92		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	105		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	118		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	94		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Batch number: 131650002A	Sample number(s): 7088251-7088254,7088256-7088257									
Aldrin	0.83	U	0.83	0.17	ug/kg	101		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	108		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	107		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	109		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	107		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	106		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	110		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	109		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	112		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	105		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	109		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	119		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	107		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	108		55-132		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	110		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	104		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	105		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	113		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 131650003A	Sample number(s): 7088258-7088260,7088262									
Aldrin	0.83	U	0.83	0.17	ug/kg	87		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	98		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	97		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	99		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	117		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	94		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	129		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	98		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	100		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	96		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	103		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	109		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	98		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	98		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	114		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	100		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	95		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	126*		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 131640006A	Sample number(s): 7088251-7088254,7088256-7088257									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	91		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	92		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	96		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	92		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	74		49-107		
Batch number: 131660003A	Sample number(s): 7088258-7088260,7088262									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	102		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	108		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	105		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 131640637004	Sample number(s): 7088251-7088257									
Aluminum	40.0	U	40.0	7.71	mg/kg	103		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	105		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	98		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	97		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	101		80-120		
Calcium	5.00	J	20.0	4.02	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	100		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	94		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Iron	40.0	U	40.0	3.80	mg/kg	100		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	102		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	100		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	101		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	103		80-120		
Phosphorus	1.15	J	10.0	0.510	mg/kg	103		80-120		
Potassium	100	U	100.	13.5	mg/kg	100		80-120		
Sodium	100	U	100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	101		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	102		80-120		
Batch number: 131640637004A	Sample number(s): 7088251-7088257									
Silver	0.200	U	0.200	0.0200	mg/kg	108		80-120		
Strontium	0.0351	J	0.400	0.0340	mg/kg	110		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	101		80-120		
Batch number: 131640637004B	Sample number(s): 7088251-7088257									
Selenium	0.400	U	0.400	0.100	mg/kg	117		80-120		
Batch number: 131640638004	Sample number(s): 7088251-7088257									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	95		85-120		
Batch number: 131670637001	Sample number(s): 7088258-7088262									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	100		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Calcium	20.0	U	20.0	4.02	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	101		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	103		80-120		
Phosphorus	1.25	J	10.0	0.510	mg/kg	103		80-120		
Potassium	100	U	100.	13.5	mg/kg	100		80-120		
Sodium	100	U	100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	104		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	102		80-120		
Batch number: 131670637001A	Sample number(s): 7088258-7088262									
Silver	0.200	U	0.200	0.0200	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0340	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	118		80-120		
Batch number: 131670637001B	Sample number(s): 7088258-7088262									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 131670638001	Sample number(s): 7088258-7088262									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	98		85-120		
Batch number: 13162039401A	Sample number(s): 7088251-7088252,7088255-7088257									
15a pH by 9045D						99		95-105		
Batch number: 13162039401B	Sample number(s): 7088258,7088261-7088262									
15a pH by 9045D						99		95-105		
Batch number: 13164162401A	Sample number(s): 7088251-7088257									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
Batch number: 13164162401B	Sample number(s): 7088258-7088262									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13168007	Sample number(s): 7088251-7088254,7088256-7088257									
2378-TCDD	0.0457	J	1.00	0.0292	ng/kg	92		67-158		
12378-PeCDD	0.148	J	5.00	0.0366	ng/kg	102		70-142		
123478-HxCDD	0.0884	J	5.00	0.0192	ng/kg	108		70-164		
123678-HxCDD	0.0822	J	5.00	0.0203	ng/kg	105		76-134		
123789-HxCDD	0.0979	J	5.00	0.0192	ng/kg	106		64-162		
1234678-HpCDD	0.0960	J	5.00	0.0192	ng/kg	103		70-140		
OCDD	0.435	J	10.0	0.0241	ng/kg	104		78-144		
2378-TCDF	0.0331	J	1.00	0.0249	ng/kg	106		75-158		
12378-PeCDF	0.209	J	5.00	0.0200	ng/kg	102		80-134		
23478-PeCDF	0.232	J	5.00	0.0217	ng/kg	104		68-160		
123478-HxCDF	0.131	J	5.00	0.0132	ng/kg	107		72-134		
123678-HxCDF	0.122	J	5.00	0.0118	ng/kg	103		84-130		
123789-HxCDF	0.136	J	5.00	0.0163	ng/kg	103		78-130		
234678-HxCDF	0.0987	J	5.00	0.0127	ng/kg	104		70-156		
1234678-HpCDF	0.0640	J	5.00	0.00540	ng/kg	102		82-122		
1234789-HpCDF	0.0329	J	5.00	0.0103	ng/kg	103		78-138		
OCDF	0.129	J	10.0	0.0282	ng/kg	102		63-170		
Batch number: 13168008	Sample number(s): 7088258-7088260,7088262									
2378-TCDD	1.00	U	1.00	0.0268	ng/kg	94		67-158		
12378-PeCDD	0.0730	J	5.00	0.0342	ng/kg	99		70-142		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDD	5.00	U	5.00	0.0187	ng/kg	106		70-164		
123678-HxCDD	0.0405	J	5.00	0.0198	ng/kg	102		76-134		
123789-HxCDD	0.0408	J	5.00	0.0183	ng/kg	104		64-162		
1234678-HpCDD	0.0749	J	5.00	0.0195	ng/kg	101		70-140		
OCDD	0.399	J	10.0	0.0232	ng/kg	103		78-144		
2378-TCDF	1.00	U	1.00	0.0231	ng/kg	102		75-158		
12378-PeCDF	0.0666	J	5.00	0.0172	ng/kg	100		80-134		
23478-PeCDF	0.0469	J	5.00	0.0169	ng/kg	102		68-160		
123478-HxCDF	0.0403	J	5.00	0.0108	ng/kg	104		72-134		
123678-HxCDF	0.0283	J	5.00	0.0102	ng/kg	101		84-130		
123789-HxCDF	0.0318	J	5.00	0.0125	ng/kg	103		78-130		
234678-HxCDF	0.0413	J	5.00	0.0106	ng/kg	102		70-156		
1234678-HpCDF	0.0373	J	5.00	0.00770	ng/kg	102		82-122		
1234789-HpCDF	0.0515	J	5.00	0.0113	ng/kg	103		78-138		
OCDF	0.0900	J	10.0	0.0251	ng/kg	100		63-170		
Batch number: 13168007	Sample number(s): 7088251-7088254,7088256-7088257									
TEQ WHO 2005 - EDLx0.0	0.266				ng/kg					
Batch number: 13168008	Sample number(s): 7088258-7088260,7088262									
TEQ WHO 2005 - EDLx0.0	0.000800				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13164SLE026	Sample number(s): 7088251,7088256-7088257 UNSPK: P088252								
Acenaphthene	96	92	48-127	4	30				
Acenaphthylene	91	89	49-121	2	30				
Anthracene	100	98	52-126	2	30				
Benzo(a)anthracene	95	93	32-135	2	30				
Benzo(a)pyrene	94	95	36-138	2	30				
Benzo(b)fluoranthene	101	103	26-142	2	30				
Benzo(e)pyrene	90	90	70-130	0	30				
Benzo(g,h,i)perylene	92	95	33-141	3	30				
Benzo(k)fluoranthene	96	95	47-129	1	30				
Butylbenzylphthalate	99	96	59-153	4	30				
Di-n-butylphthalate	106	101	62-154	4	30				
Chrysene	90	88	29-148	1	30				
Dibenz(a,h)anthracene	96	99	34-125	3	30				
Diethylphthalate	94	79	76-127	17	30				
Dimethylphthalate	87	83	62-136	5	30				
Bis(2-Ethylhexyl)phthalate	106	102	39-167	4	30				
Fluoranthene	101	96	47-135	5	30				
Fluorene	89	85	50-129	4	30				
Indeno(1,2,3-cd)pyrene	96	98	17-136	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	105	98	50-131	6	30				
2-Methylnaphthalene	105	100	28-144	4	30				
Naphthalene	84	81	31-148	3	30				
N-Nitrosodimethylamine	112	89	48-113	23	30				
Di-n-octylphthalate	162	-49*	52-162	75*	30				
Phenanthrene	102	96	29-142	5	30				
Pyrene	89	90	26-143	1	30				
Batch number: 13164SLG026	Sample number(s): 7088258-7088260,7088262 UNSPK: 7088258								
Acenaphthene	82	91	48-127	10	30				
Acenaphthylene	82	87	49-121	5	30				
Anthracene	84	90	52-126	6	30				
Benzo(a)anthracene	81	107	32-135	27	30				
Benzo(a)pyrene	91	108	36-138	15	30				
Benzo(b)fluoranthene	105	128	26-142	19	30				
Benzo(e)pyrene	92	116	70-130	22	30				
Benzo(g,h,i)perylene	61	59	33-141	4	30				
Benzo(k)fluoranthene	94	117	47-129	21	30				
Butylbenzylphthalate	51*	101	59-153	65*	30				
Di-n-butylphthalate	72	99	62-154	30	30				
Chrysene	78	129	29-148	48*	30				
Dibenz(a,h)anthracene	54	78	34-125	35*	30				
Diethylphthalate	65*	81	76-127	21	30				
Dimethylphthalate	83	86	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	73	102	39-167	31*	30				
Fluoranthene	81	94	47-135	14	30				
Fluorene	87	100	50-129	12	30				
Indeno(1,2,3-cd)pyrene	59	70	17-136	15	30				
1-Methylnaphthalene	85	85	50-131	0	30				
2-Methylnaphthalene	84	88	28-144	4	30				
Naphthalene	80	80	31-148	1	30				
N-Nitrosodimethylamine	78	86	48-113	8	30				
Di-n-octylphthalate	81	147	52-162	57*	30				
Phenanthrene	81	92	29-142	11	30				
Pyrene	80	92	26-143	13	30				
Batch number: 13171SLC026	Sample number(s): 7088252-7088254 UNSPK: 7088252								
Acenaphthene	98	98	48-127	1	30				
Acenaphthylene	109	111	49-121	2	30				
Anthracene	99	102	52-126	3	30				
Benzo(a)anthracene	95	97	32-135	2	30				
Benzo(a)pyrene	88	92	36-138	5	30				
Benzo(b)fluoranthene	103	102	26-142	2	30				
Benzo(e)pyrene	84	87	70-130	4	30				
Benzo(g,h,i)perylene	82	90	33-141	9	30				
Benzo(k)fluoranthene	92	89	47-129	4	30				
Butylbenzylphthalate	120	122	59-153	2	30				
Di-n-butylphthalate	113	116	62-154	2	30				
Chrysene	94	93	29-148	1	30				
Dibenz(a,h)anthracene	88	96	34-125	8	30				
Diethylphthalate	85	114	76-127	29	30				
Dimethylphthalate	100	101	62-136	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bis(2-Ethylhexyl)phthalate	123	121	39-167	2	30				
Fluoranthene	98	98	47-135	0	30				
Fluorene	95	94	50-129	1	30				
Indeno(1,2,3-cd)pyrene	88	94	17-136	7	30				
1-Methylnaphthalene	94	97	50-131	3	30				
2-Methylnaphthalene	93	95	28-144	3	30				
Naphthalene	94	94	31-148	0	30				
N-Nitrosodimethylamine	96	99	48-113	2	30				
Di-n-octylphthalate	-74 (2)	-424 (2)	52-162	115*	30				
Phenanthrene	93	93	29-142	0	30				
Pyrene	96	95	26-143	1	30				
Batch number: 131650002A	Sample number(s): 7088251-7088254,7088256-7088257 UNSPK: 7088252								
Aldrin	95	100	16-126	4	50				
Alpha BHC	98	101	14-140	3	50				
Beta BHC	97	97	10-173	0	50				
Gamma BHC - Lindane	102	102	30-137	0	50				
p,p-DDD	102	105	43-149	1	50				
p,p-DDE	103	105	18-161	1	50				
p,p-DDT	105	109	12-193	3	50				
Delta BHC	101	100	13-153	2	50				
Dieldrin	104	108	19-154	2	50				
Endosulfan I	96	100	16-137	3	50				
Endosulfan II	98	101	10-156	3	50				
Endosulfan Sulfate	102	105	10-181	2	50				
Endrin	104	108	30-152	3	50				
Endrin Aldehyde	93	97	10-152	3	35				
Endrin Ketone	96	99	10-160	2	50				
Heptachlor	94	96	16-152	1	50				
Heptachlor Epoxide	92	94	17-167	2	50				
Methoxychlor	104	107	34-168	2	50				
Batch number: 131650003A	Sample number(s): 7088258-7088260,7088262 UNSPK: 7088258								
Aldrin	76	86	16-126	13	50				
Alpha BHC	83	95	14-140	13	50				
Beta BHC	88	93	10-173	5	50				
Gamma BHC - Lindane	89	105	30-137	17	50				
p,p-DDD	107	138	43-149	25	50				
p,p-DDE	83	88	18-161	7	50				
p,p-DDT	122	185	12-193	41	50				
Delta BHC	83	99	13-153	17	50				
Dieldrin	92	98	19-154	7	50				
Endosulfan I	82	89	16-137	8	50				
Endosulfan II	89	101	10-156	13	50				
Endosulfan Sulfate	88	113	10-181	25	50				
Endrin	90	100	30-152	11	50				
Endrin Aldehyde	89	94	10-152	5	35				
Endrin Ketone	100	119	10-160	17	50				
Heptachlor	90	147	16-152	47	50				
Heptachlor Epoxide	87	92	17-167	5	50				
Methoxychlor	116	231*	34-168	67*	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131640006A	Sample number(s): 7088251-7088254,7088256-7088257 UNSPK: 7088252								
EFH (C12-C14)	78	99	49-123	24*	20				
EFH (C15-C20)	110	178*	49-123	47*	20				
EFH (C21-C30)	146*	340*	49-123	62*	20				
EFH (C30-C40)	161*	483*	49-123	71*	20				
EFH (C8-C11)	64	83	49-123	26*	20				
Batch number: 131660003A	Sample number(s): 7088258-7088260,7088262 UNSPK: 7088258								
EFH (C12-C14)	92	85	49-123	8	20				
EFH (C15-C20)	106	174*	49-123	49*	20				
EFH (C21-C30)	108	1702*	49-123	176*	20				
EFH (C30-C40)	96	4133*	49-123	191*	20				
EFH (C8-C11)	80	75	49-123	5	20				
Batch number: 131640637004	Sample number(s): 7088251-7088257 UNSPK: 7088252 BKG: 7088252								
Aluminum	2568 (2)	2305 (2)	75-125	2	20	22,900	23,100	1	20
Antimony	59*	59*	75-125	1	20	3.92 U	3.92 U	0 (1)	20
Arsenic	95	92	75-125	3	20	4.33	4.72	9 (1)	20
Barium	100	97	75-125	2	20	106	104	2	20
Beryllium	101	101	75-125	0	20	0.796 J	0.789 J	1 (1)	20
Boron	97	97	75-125	1	20	4.81 J	4.88 J	1 (1)	20
Cadmium	94	94	75-125	0	20	0.501 J	0.454 J	10 (1)	20
Calcium	144 (2)	135 (2)	75-125	2	20	1,760	1,700	4	20
Chromium	110	106	75-125	2	20	21.6	21.5	1	20
Cobalt	93	94	75-125	0	20	6.39	6.53	2	20
Copper	34*	51*	75-125	40*	20	19.6 U	19.6 U	0 (1)	20
Iron	930 (2)	510 (2)	75-125	2	20	21,700	21,500	1	20
Lead	96	94	75-125	1	20	6.37	6.34	0 (1)	20
Lithium	100	100	75-125	0	20	22.1	22.0	1	20
Magnesium	179 (2)	144 (2)	75-125	2	20	3,740	3,660	2	20
Manganese	131 (2)	129 (2)	75-125	0	20	270	277	3	20
Molybdenum	95	95	75-125	0	20	1.59 J	1.00 J	45* (1)	20
Nickel	98	97	75-125	1	20	13.9	13.6	2	20
Phosphorus	98	97	75-125	0	20	212	210	1	20
Potassium	142*	136*	75-125	2	20	2,130	2,080	2	20
Sodium	98	97	75-125	0	20	97.1 J	95.2 J	2 (1)	20
Tin	90	89	75-125	0	20	3.03 J	3.03 J	0 (1)	20
Titanium	361 (2)	310 (2)	75-125	3	20	1,290	1,280	0	20
Vanadium	110	107	75-125	1	20	40.5	40.6	0	20
Zinc	99	98	75-125	0	20	41.6	40.3	3	20
Zirconium	94	93	75-125	2	20	2.20 J	2.80 J	24* (1)	20
Batch number: 131640637004A	Sample number(s): 7088251-7088257 UNSPK: 7088252 BKG: 7088252								
Silver	152*	112	75-125	30*	20	0.0435 J	0.0666 J	42* (1)	20
Strontium	300*	117	75-125	37*	20	22.2	25.5	14	20
Thallium	181*	120	75-125	28*	20	0.256	0.321	23* (1)	20
Batch number: 131640637004B	Sample number(s): 7088251-7088257 UNSPK: 7088252 BKG: 7088252								
Selenium	147*	104	75-125	33*	20	0.153 J	0.207 J	30* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131640638004	Sample number(s): 7088251-7088257 UNSPK: 7088252 BKG: 7088252								
3a Mercury 7471A	95	94	65-135	2	20	0.0122 J	0.0122 J	1 (1)	20
Batch number: 131670637001	Sample number(s): 7088258-7088262 UNSPK: 7088258 BKG: 7088258								
Aluminum	1829 (2)	1645 (2)	75-125	2	20	17,100	17,400	2	20
Antimony	66*	64*	75-125	3	20	0.685 J	0.621 J	10 (1)	20
Arsenic	93	90	75-125	1	20	6.46	6.04	7 (1)	20
Barium	96	97	75-125	1	20	54.3	52.3	4	20
Beryllium	100	100	75-125	0	20	0.667 J	0.669 J	0 (1)	20
Boron	94	95	75-125	1	20	2.35 J	2.03 J	15 (1)	20
Cadmium	81	82	75-125	2	20	0.971 U	0.971 U	0 (1)	20
Calcium	124	130*	75-125	1	20	1,510	1,510	0	20
Chromium	104	102	75-125	1	20	19.7	19.5	1	20
Cobalt	92	92	75-125	0	20	3.07	2.98	3 (1)	20
Copper	100	100	75-125	0	20	8.07	8.10	0 (1)	20
Iron	3374 (2)	-244 (2)	75-125	15	20	21,800	22,100	1	20
Lead	93	87	75-125	5	20	5.96	5.77	3 (1)	20
Lithium	99	98	75-125	0	20	21.4	22.2	4	20
Magnesium	241 (2)	165 (2)	75-125	3	20	4,250	4,320	2	20
Manganese	117	99	75-125	5	20	121	125	3	20
Molybdenum	91	91	75-125	0	20	0.316 J	0.225 J	33* (1)	20
Nickel	93	93	75-125	0	20	8.20	8.25	1 (1)	20
Phosphorus	103	86	75-125	8	20	107	100	6	20
Potassium	139*	130*	75-125	3	20	1,420	1,470	4	20
Sodium	98	94	75-125	2	20	834	842	1	20
Tin	86	86	75-125	0	20	2.91 J	2.88 J	1 (1)	20
Titanium	262 (2)	267 (2)	75-125	0	20	1,010	1,030	2	20
Vanadium	113	103	75-125	6	20	35.2	34.9	1	20
Zinc	100	97	75-125	2	20	39.0	39.5	1	20
Zirconium	98	97	75-125	1	20	2.92 J	2.89 J	1 (1)	20
Batch number: 131670637001A	Sample number(s): 7088258-7088262 UNSPK: 7088258 BKG: 7088258								
Silver	101	101	75-125	0	20	0.0297 J	0.0286 J	4 (1)	20
Strontium	93	88	75-125	2	20	17.5	16.0	9	20
Thallium	86	89	75-125	3	20	0.245	0.233	5 (1)	20
Batch number: 131670637001B	Sample number(s): 7088258-7088262 UNSPK: 7088258 BKG: 7088258								
Selenium	99	93	75-125	7	20	0.388 U	0.388 U	0 (1)	20
Batch number: 131670638001	Sample number(s): 7088258-7088262 UNSPK: 7088258 BKG: 7088258								
3a Mercury 7471A	108	109	65-135	2	20	0.0165 U	0.0137 J	200* (1)	20
Batch number: 13162039401A	Sample number(s): 7088251-7088252,7088255-7088257 BKG: 7088252								
15a pH by 9045D						6.33	6.40	1	3
Batch number: 13162039401B	Sample number(s): 7088258,7088261-7088262 BKG: 7088258								
15a pH by 9045D						7.86	8.56	9*	3
Batch number: 13164162401A	Sample number(s): 7088251-7088257 BKG: 7088252								
14a Moisture Content by 160.3						2.0	2.0	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
14a Moisture Content by 160.3						2.0	2.0	1	20
14a Moisture Content by 160.3						2.0	2.0	1	20
Batch number: 13164162401B	Sample number(s): 7088258-7088262 BKG: 7088258								
14a Moisture Content by 160.3						6.8	6.7	2	20
14a Moisture Content by 160.3						6.8	6.7	2	20
14a Moisture Content by 160.3						6.8	6.7	2	20
Batch number: 13168007	Sample number(s): 7088251-7088254,7088256-7088257 UNSPK: 7088252								
2378-TCDD	95	94	40-135	2	20				
12378-PeCDD	100	97	40-135	3	20				
123478-HxCDD	104	104	40-135	2	20				
123678-HxCDD	103	102	40-135	2	20				
123789-HxCDD	103	102	40-135	3	20				
1234678-HpCDD	115	95	40-135	18	20				
OCDD	183*	74	40-135	68*	20				
2378-TCDF	98	98	40-135	0	20				
12378-PeCDF	100	100	40-135	1	20				
23478-PeCDF	100	101	40-135	0	20				
123478-HxCDF	104	102	40-135	2	20				
123678-HxCDF	101	101	40-135	1	20				
123789-HxCDF	102	102	40-135	1	20				
234678-HxCDF	103	100	40-135	4	20				
1234678-HpCDF	105	100	40-135	5	20				
1234789-HpCDF	101	101	40-135	1	20				
OCDF	101	98	40-135	4	20				
Batch number: 13168008	Sample number(s): 7088258-7088260,7088262 UNSPK: 7088258								
2378-TCDD	97	95	40-135	4	20				
12378-PeCDD	98	99	40-135	1	20				
123478-HxCDD	105	107	40-135	1	20				
123678-HxCDD	101	101	40-135	2	20				
123789-HxCDD	103	102	40-135	3	20				
1234678-HpCDD	100	102	40-135	1	20				
OCDD	101	111	40-135	7	20				
2378-TCDF	98	97	40-135	3	20				
12378-PeCDF	100	100	40-135	2	20				
23478-PeCDF	102	104	40-135	0	20				
123478-HxCDF	103	104	40-135	1	20				
123678-HxCDF	99	101	40-135	0	20				
123789-HxCDF	102	102	40-135	2	20				
234678-HxCDF	104	102	40-135	5	20				
1234678-HpCDF	102	104	40-135	0	20				
1234789-HpCDF	102	102	40-135	2	20				
OCDF	100	101	40-135	1	20				

Surrogate Quality Control

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13164SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7088251	74	82	89
7088256	83	80	91
7088257	68	70	79
Blank	86	95	100
LCS	85	94	94
MS	87	88	101
MSD	86	86	93
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13164SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7088258	68	64	76
7088259	73	69	84
7088260	84	88	87
7088262	90	91	79
Blank	87	98	100
LCS	89	99	101
MS	73	69	84
MSD	84	88	87
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13171SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7088252	79	86	88
7088253	78	82	88
7088254	83	89	92
Blank	80	88	92
LCS	79	67	89
MS	78	82	88
MSD	83	89	92
Limits:	54-129	61-134	55-129

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 131650002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7088251	87	95
7088252	92	95

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Surrogate Quality Control

7088253	95	98
7088254	98	103
7088256	93	101
7088257	88	89
Blank	98	100
LCS	104	108
MS	95	98
MSD	98	103
Limits:	50-130	20-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 131650003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7088258	87	122*
7088259	76	99
7088260	84	115
7088262	85	103
Blank	91	112
LCS	85	115
MS	76	99
MSD	84	115
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131640006A

	Chlorobenzene	Orthoterphenyl
7088251	97	74
7088252	87	104
7088253	81	86
7088254	92	82
7088256	88	107
7088257	88	92
Blank	92	93
LCS	93	96
MS	81	86
MSD	92	82
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131660003A

	Chlorobenzene	Orthoterphenyl
7088258	93	92
7088259	95	97
7088260	91	85
7088262	88	87
Blank	98	99
LCS	102	106
MS	95	97
MSD	91	85

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Surrogate Quality Control

Limits: 37-125 66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13168007

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7088251	74	79	80	86	80	81
7088252	70	75	77	85	80	77
7088253	75	81	81	91	83	82
7088254	67	72	73	81	75	72
7088256	84	87	93	102	94	95
7088257	78	78	81	85	82	79
Blank	71	75	79	90	84	74
MS	75	81	81	91	83	82
MSD	67	72	73	81	75	72
OPR	60	63	68	82	73	63
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7088251	98	80	77	82	79	81
7088252	101	82	80	79	80	81
7088253	107	79	73	83	83	85
7088254	103	73	69	76	75	78
7088256	117	97	92	91	95	97
7088257	98	78	76	82	82	86
Blank	127	79	78	82	87	89
MS	107	79	73	83	83	85
MSD	103	73	69	76	75	78
OPR	114	67	67	69	76	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7088251	80	87	90	69	81
7088252	81	88	92	62	77
7088253	83	91	93	69	82
7088254	77	85	87	60	76
7088256	95	105	108	77	89
7088257	83	88	89	71	80
Blank	87	98	104	64	82
MS	83	91	93	69	82
MSD	77	85	87	60	76
OPR	75	87	95	53	69
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13168008

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7088258	61	66	70	80	71	67
7088259	64	69	75	83	76	73
7088260	77	81	81	83	81	84

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396058
Reported: 06/21/13 at 07:52 PM

Surrogate Quality Control

7088262	71	79	78	84	80	80
Blank	78	81	86	94	89	88
MS	64	69	75	83	76	73
MSD	77	81	81	83	81	84
OPR	57	60	62	70	65	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7088258	90	71	69	70	74	74
7088259	99	79	80	75	78	80
7088260	87	84	82	83	77	80
7088262	99	84	84	83	80	85
Blank	117	92	95	86	92	94
MS	99	79	80	75	78	80
MSD	87	84	82	83	77	80
OPR	91	66	69	67	67	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7088258	74	79	81	56	69	
7088259	78	85	88	58	72	
7088260	80	83	82	72	79	
7088262	82	90	92	64	78	
Blank	93	99	106	70	84	
MS	78	85	88	58	72	
MSD	80	83	82	72	79	
OPR	69	77	81	49	64	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1396058 7088251-62

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/10/2013
CarrierName: FedEx
AirbillNo: 799965626724

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130610-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-773-SA5A-SB-0.0-0.5	6/10/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X								X			X											
SL-773-SA5A-SB-0.0-0.5	6/10/13 08:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-774-SA5A-SB-0.0-0.5MS	6/10/13 09:55	SO	None	6 - SS-Sleeve	10 day	X	X					X		X								X			X											MS/MSD
SL-774-SA5A-SB-0.0-0.5MS	6/10/13 09:55	SO	None	1 - 8 oz glass	10 day														X																	MS/MSD
SL-1174-SA5A-SB-0.0-0.5	6/10/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X								X			X											
SL-1174-SA5A-SB-0.0-0.5	6/10/13 10:10	SO	None	1 - 4 oz glass	10 day														X																	
SL-776-SA5A-SB-0.0-0.5	6/10/13 10:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X								X			X											
SL-776-SA5A-SB-0.0-0.5	6/10/13 10:45	SO	None	1 - 4 oz glass	10 day														X																	
SL-776-SA5A-SB-6.0-7.0MS	6/10/13 11:30	SO	None	6 - 16 oz glass	10 day	X	X					X		X				X				X			X											MS/MSD
SL-1176-SA5A-SB-6.0-7.0	6/10/13 11:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X				X			X											

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Hypela	6/10/13	1600									
									Kathy	6/11/13	0925

COC Rev 2

COC: 20130610-01, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1396058

Client/Project: COM Smith

Date of Receipt: 6/11/13

Time of Receipt: 0925

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.3	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/11/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 24, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/11/2013
Group Number: 1396059
SDG: PH053
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
TB-061013 Water	7088263
SL-776-SA5A-6.0-7.0 Soil	7088264
SL-776-SA5A-6.0-7.0MS Soil	7088265
SL-776-SA5A-6.0-7.0MSD Soil	7088266
SL-1176-SA5A-6.0-7.0 Soil	7088267
SL-777-SA5A-0.0-0.5 Soil	7088268
SL-779-SA5A-0.0-0.5 Soil	7088269

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-061013 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7088263
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 08:00

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB610 SDG#: PH053-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13165C20A	06/17/2013 13:53	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13165C20A	06/17/2013 13:53	Marie D John	1

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

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Analysis Report

Sample Description: SL-776-SA5A-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088264
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77667 SDG#: PH053-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	23.15
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 17:06	Laura M Krieger	23.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316231376	06/11/2013 11:16	Larry E Bevins	n.a.
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-6.0-7.0MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088265
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77667 SDG#: PH053-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.7	1.0	0.2	23.63
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.7	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 17:44	Laura M Krieger	23.63
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316231376	06/11/2013 11:16	Larry E Bevins	n.a.
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-776-SA5A-6.0-7.0MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088266
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:30 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77667 SDG#: PH053-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.7	1.0	0.2	24.18
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	5.7	0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	6.6	0.10	0.10	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 18:22	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316231376	06/11/2013 11:17	Larry E Bevins	n.a.
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-1176-SA5A-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088267
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 11:40 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11766 SDG#: PH053-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.4	J	1.0	0.2	23.81
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 15:50	Laura M Krieger	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316231376	06/11/2013 11:18	Larry E Bevins	n.a.
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.6	J	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	7.4		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	71		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	48		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	82		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	34		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	13		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	79		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	6.6		1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	100		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	16		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	49		18	6.1	1
12969	Phenanthrene	85-01-8	45		1.7	0.68	1
12969	Pyrene	129-00-0	100		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.3		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		40.3	7.78	1
06944	Antimony	7440-36-0	0.703	J	4.03	0.504	1
06935	Arsenic	7440-38-2	4.59		4.03	0.333	1
06946	Barium	7440-39-3	101		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.567	J	1.01	0.0676	1
07914	Boron	7440-42-8	3.67	J	10.1	0.837	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0333	1
01650	Calcium	7440-70-2	2,000		20.2	4.05	1
06951	Chromium	7440-47-3	18.8		3.03	0.0888	1
06952	Cobalt	7440-48-4	5.57		1.01	0.0908	1
06953	Copper	7440-50-8	10.7		2.02	0.182	1
01654	Iron	7439-89-6	18,700		40.3	3.83	1
06955	Lead	7439-92-1	10.8		3.03	0.474	1
01656	Lithium	7439-93-2	17.4		4.0	0.55	1
01657	Magnesium	7439-95-4	3,660		10.1	1.74	1
06958	Manganese	7439-96-5	337		1.01	0.0837	1
06960	Molybdenum	7439-98-7	0.566	J	2.02	0.171	1
06961	Nickel	7440-02-0	11.7		2.02	0.111	1
10145	Phosphorus	7723-14-0	320		10.1	0.514	1
01662	Potassium	7440-09-7	3,310		101	13.6	1
01667	Sodium	7440-23-5	83.5	J	101	16.8	1
06969	Tin	7440-31-5	2.69	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,140		1.01	0.171	1
06971	Vanadium	7440-62-2	32.6		1.01	0.111	1
06972	Zinc	7440-66-6	51.3		4.03	0.202	1
10146	Zirconium	7440-67-7	2.90	J	5.04	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.156	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0485	J	0.202	0.0202	2
06144	Strontium	7440-24-6	20.5		0.403	0.0343	2
06145	Thallium	7440-28-0	0.265		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.65		0.0100	0.0100	1

The pH was measured in water at 22.7 C.

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	2.8	0.10	0.10	1

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

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0432	JQ	1.02	0.0249	1
11031	12378-PeCDD	40321-76-4	0.192	JBQ	5.09	0.0376	1
11031	123478-HxCDD	39227-28-6	0.166	JQ	5.09	0.0351	1
11031	123678-HxCDD	57653-85-7	0.639	JB	5.09	0.0357	1
11031	123789-HxCDD	19408-74-3	0.800	JB	5.09	0.0335	1
11031	1234678-HpCDD	35822-46-9	10.7	B	5.09	0.0459	1
11031	OCDD	3268-87-9	172	B	10.2	0.0373	1
11031	2378-TCDF	51207-31-9	0.101	J	1.02	0.0331	1
11031	12378-PeCDF	57117-41-6	0.266	JB	5.09	0.0219	1
11031	23478-PeCDF	57117-31-4	0.207	JB	5.09	0.0210	1
11031	123478-HxCDF	70648-26-9	0.134	JB	5.09	0.0197	1
11031	123678-HxCDF	57117-44-9	0.142	JB	5.09	0.0190	1
11031	123789-HxCDF	72918-21-9	0.366	JB	5.09	0.0225	1
11031	234678-HxCDF	60851-34-5	0.108	JB	5.09	0.0189	1
11031	1234678-HpCDF	67562-39-4	1.03	JB	5.09	0.0145	1
11031	1234789-HpCDF	55673-89-7	0.130	JB	5.09	0.0191	1
11031	OCDF	39001-02-0	2.49	JB	10.2	0.0265	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.470				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	91	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13164SLG026	06/20/2013 09:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13164SLG026	06/14/2013 08:00	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 18:36	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 13:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 11:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:05	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:15	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:15	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:15	David K Beck	2

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

Sample Description: SL-777-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088268
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:45 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77705 SDG#: PH053-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:15	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401B	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.5		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.2		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	0.81	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	22		18	6.1	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.8		1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	7.0		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	20		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		40.3	7.78	1
06944	Antimony	7440-36-0	0.773	J	4.03	0.504	1
06935	Arsenic	7440-38-2	5.04		4.03	0.333	1
06946	Barium	7440-39-3	107		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.662	J	1.01	0.0676	1
07914	Boron	7440-42-8	3.45	J	10.1	0.837	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0333	1
01650	Calcium	7440-70-2	2,240		20.2	4.05	1
06951	Chromium	7440-47-3	33.9		3.03	0.0888	1
06952	Cobalt	7440-48-4	5.99		1.01	0.0908	1
06953	Copper	7440-50-8	11.8		2.02	0.182	1
01654	Iron	7439-89-6	22,600		40.3	3.83	1
06955	Lead	7439-92-1	6.92		3.03	0.474	1
01656	Lithium	7439-93-2	21.1		4.0	0.55	1
01657	Magnesium	7439-95-4	4,420		10.1	1.74	1
06958	Manganese	7439-96-5	341		1.01	0.0837	1
06960	Molybdenum	7439-98-7	0.572	J	2.02	0.171	1
06961	Nickel	7440-02-0	18.7		2.02	0.111	1
10145	Phosphorus	7723-14-0	377		10.1	0.514	1
01662	Potassium	7440-09-7	3,590		101	13.6	1
01667	Sodium	7440-23-5	84.1	J	101	16.8	1
06969	Tin	7440-31-5	2.79	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,200		1.01	0.171	1
06971	Vanadium	7440-62-2	38.0		1.01	0.111	1
06972	Zinc	7440-66-6	57.9		4.03	0.202	1
10146	Zirconium	7440-67-7	3.55	J	5.04	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.120	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0339	J	0.202	0.0202	2
06144	Strontium	7440-24-6	22.5		0.403	0.0343	2
06145	Thallium	7440-28-0	0.245		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.84		0.0100	0.0100	1

The pH was measured in water at 22.6 C.

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	2.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0246	J	0.982	0.0225	1
11031	12378-PeCDD	40321-76-4	0.114	JB	4.91	0.0322	1
11031	123478-HxCDD	39227-28-6	0.140	JQ	4.91	0.0301	1
11031	123678-HxCDD	57653-85-7	0.369	JB	4.91	0.0315	1
11031	123789-HxCDD	19408-74-3	0.560	JB	4.91	0.0303	1
11031	1234678-HpCDD	35822-46-9	7.43	B	4.91	0.0428	1
11031	OCDD	3268-87-9	134	B	9.82	0.0316	1
11031	2378-TCDF	51207-31-9	0.0369	JQ	0.982	0.0249	1
11031	12378-PeCDF	57117-41-6	0.166	JB	4.91	0.0179	1
11031	23478-PeCDF	57117-31-4	0.0556	JB	4.91	0.0175	1
11031	123478-HxCDF	70648-26-9	0.104	JBQ	4.91	0.0147	1
11031	123678-HxCDF	57117-44-9	0.0664	JB	4.91	0.0133	1
11031	123789-HxCDF	72918-21-9	0.227	JBQ	4.91	0.0172	1
11031	234678-HxCDF	60851-34-5	0.0628	JB	4.91	0.0132	1
11031	1234678-HpCDF	67562-39-4	0.740	JB	4.91	0.00957	1
11031	1234789-HpCDF	55673-89-7	0.0702	JB	4.91	0.0142	1
11031	OCDF	39001-02-0	2.05	JB	9.82	0.0264	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.389				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13172SLC026	06/22/2013 08:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13172SLC026	06/21/2013 09:30	Anna E Stager	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	131650003A	06/19/2013 18:49	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	131650003A	06/14/2013 11:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131660003A	06/18/2013 13:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131660003A	06/17/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13168008	06/21/2013 12:05	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13168008	06/17/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:17	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:22	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:22	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:22	David K Beck	2

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

Sample Description: SL-779-SA5A-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7088269
LLI Group # 1396059
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/10/2013 14:00 by VC

Submitted: 06/11/2013 09:25
Reported: 06/24/2013 11:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77905 SDG#: PH053-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:22	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13162039401B	06/11/2013 17:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402A	06/13/2013 20:03	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13164SLG026	Sample number(s): 7088268									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	107		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	102		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	95		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	100		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	105		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	96		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	101		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	111		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	105		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	113		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Batch number: 13172SLC026	Sample number(s): 7088269									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	91		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	95		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	94		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	86		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	96		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	93		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	96		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	96		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	92		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	105		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	98		70-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	99		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	94		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	97		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	93		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	86		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	103		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	89		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	90		71-120		
Batch number: 13165C20A	Sample number(s): 7088263									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	99	96	75-135	3	30
Batch number: 13169A16A	Sample number(s): 7088264-7088267									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 131650003A	Sample number(s): 7088268-7088269									
Aldrin	0.83	U	0.83	0.17	ug/kg	87		73-119		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	98		72-126		
Beta BHC	1.9	U	1.9	0.96	ug/kg	97		76-123		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	99		72-128		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	117		76-138		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	94		76-126		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	129		72-131		
Delta BHC	0.83	U	0.83	0.45	ug/kg	98		73-128		
Dieldrin	1.7	U	1.7	0.33	ug/kg	100		78-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	96		62-125		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	103		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	109		72-138		
Endrin	1.7	U	1.7	0.33	ug/kg	98		75-130		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	98		55-132		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	114		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	100		69-125		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	95		78-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	126*		59-125		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 131660003A	Sample number(s): 7088268-7088269									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	102		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	105		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	108		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	105		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		49-107		
Batch number: 131670637001	Sample number(s): 7088268-7088269									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	100		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	20.0	U	20.0	4.02	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	101		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	103		80-120		
Phosphorus	1.25	J	10.0	0.510	mg/kg	103		80-120		
Potassium	100 U		100.	13.5	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	104		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	102		80-120		
Batch number: 131670637001A	Sample number(s): 7088268-7088269									
Silver	0.200	U	0.200	0.0200	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0340	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	118		80-120		
Batch number: 131670637001B	Sample number(s): 7088268-7088269									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 131670638001	Sample number(s): 7088268-7088269									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	98		85-120		
Batch number: 13162039401B	Sample number(s): 7088268-7088269									
15a pH by 9045D						99		95-105		
Batch number: 13164162402A	Sample number(s): 7088264-7088269									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13168008	Sample number(s): 7088268-7088269									
2378-TCDD	1.00	U	1.00	0.0268	ng/kg	94		67-158		
12378-PeCDD	0.0730	J	5.00	0.0342	ng/kg	99		70-142		
123478-HxCDD	5.00	U	5.00	0.0187	ng/kg	106		70-164		
123678-HxCDD	0.0405	J	5.00	0.0198	ng/kg	102		76-134		
123789-HxCDD	0.0408	J	5.00	0.0183	ng/kg	104		64-162		
1234678-HpCDD	0.0749	J	5.00	0.0195	ng/kg	101		70-140		
OCDD	0.399	J	10.0	0.0232	ng/kg	103		78-144		
2378-TCDF	1.00	U	1.00	0.0231	ng/kg	102		75-158		
12378-PeCDF	0.0666	J	5.00	0.0172	ng/kg	100		80-134		
23478-PeCDF	0.0469	J	5.00	0.0169	ng/kg	102		68-160		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDF	0.0403 J	5.00	0.0108	ng/kg	104		72-134		
123678-HxCDF	0.0283 J	5.00	0.0102	ng/kg	101		84-130		
123789-HxCDF	0.0318 J	5.00	0.0125	ng/kg	103		78-130		
234678-HxCDF	0.0413 J	5.00	0.0106	ng/kg	102		70-156		
1234678-HpCDF	0.0373 J	5.00	0.00770	ng/kg	102		82-122		
1234789-HpCDF	0.0515 J	5.00	0.0113	ng/kg	103		78-138		
OCDF	0.0900 J	10.0	0.0251	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.000800			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13164SLG026	Sample number(s): 7088268 UNSPK: P088258								
Acenaphthene	82	91	48-127	10	30				
Acenaphthylene	82	87	49-121	5	30				
Anthracene	84	90	52-126	6	30				
Benzo(a)anthracene	81	107	32-135	27	30				
Benzo(a)pyrene	91	108	36-138	15	30				
Benzo(b)fluoranthene	105	128	26-142	19	30				
Benzo(e)pyrene	92	116	70-130	22	30				
Benzo(g,h,i)perylene	61	59	33-141	4	30				
Benzo(k)fluoranthene	94	117	47-129	21	30				
Butylbenzylphthalate	51*	101	59-153	65*	30				
Di-n-butylphthalate	72	99	62-154	30	30				
Chrysene	78	129	29-148	48*	30				
Dibenz(a,h)anthracene	54	78	34-125	35*	30				
Diethylphthalate	65*	81	76-127	21	30				
Dimethylphthalate	83	86	62-136	3	30				
Bis(2-Ethylhexyl)phthalate	73	102	39-167	31*	30				
Fluoranthene	81	94	47-135	14	30				
Fluorene	87	100	50-129	12	30				
Indeno(1,2,3-cd)pyrene	59	70	17-136	15	30				
1-Methylnaphthalene	85	85	50-131	0	30				
2-Methylnaphthalene	84	88	28-144	4	30				
Naphthalene	80	80	31-148	1	30				
N-Nitrosodimethylamine	78	86	48-113	8	30				
Di-n-octylphthalate	81	147	52-162	57*	30				
Phenanthrene	81	92	29-142	11	30				
Pyrene	80	92	26-143	13	30				
Batch number: 13172SLC026	Sample number(s): 7088269 UNSPK: 7088269								
Acenaphthene	58	38*	48-127	41*	30				
Acenaphthylene	67	44*	49-121	41*	30				
Anthracene	65	41*	52-126	45*	30				
Benzo(a)anthracene	62	41	32-135	41*	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(a)pyrene	63	42	36-138	41*	30				
Benzo(b)fluoranthene	62	43	26-142	32*	30				
Benzo(e)pyrene	62*	41*	70-130	41*	30				
Benzo(g,h,i)perylene	63	41	33-141	41*	30				
Benzo(k)fluoranthene	65	40*	47-129	47*	30				
Butylbenzylphthalate	73	49*	59-153	39*	30				
Di-n-butylphthalate	72	46*	62-154	42*	30				
Chrysene	56	35	29-148	42*	30				
Dibenz(a,h)anthracene	58	37	34-125	43*	30				
Diethylphthalate	63*	42*	76-127	39*	30				
Dimethylphthalate	58*	38*	62-136	42*	30				
Bis(2-Ethylhexyl)phthalate	61	28*	39-167	40*	30				
Fluoranthene	53	33*	47-135	40*	30				
Fluorene	59	38*	50-129	42*	30				
Indeno(1,2,3-cd)pyrene	61	39	17-136	44*	30				
1-Methylnaphthalene	61	39*	50-131	42*	30				
2-Methylnaphthalene	60	39	28-144	43*	30				
Naphthalene	57	37	31-148	42*	30				
N-Nitrosodimethylamine	58	36*	48-113	47*	30				
Di-n-octylphthalate	427*	51*	52-162	124*	30				
Phenanthrene	55	34	29-142	43*	30				
Pyrene	57	36	26-143	41*	30				
Batch number: 13169A16A	Sample number(s): 7088264-7088267 UNSPK: 7088264								
11a TPH by EPA 8015B GRO	79	86	39-118	10	30				
Batch number: 131650003A	Sample number(s): 7088268-7088269 UNSPK: P088258								
Aldrin	76	86	16-126	13	50				
Alpha BHC	83	95	14-140	13	50				
Beta BHC	88	93	10-173	5	50				
Gamma BHC - Lindane	89	105	30-137	17	50				
p,p-DDD	107	138	43-149	25	50				
p,p-DDE	83	88	18-161	7	50				
p,p-DDT	122	185	12-193	41	50				
Delta BHC	83	99	13-153	17	50				
Dieldrin	92	98	19-154	7	50				
Endosulfan I	82	89	16-137	8	50				
Endosulfan II	89	101	10-156	13	50				
Endosulfan Sulfate	88	113	10-181	25	50				
Endrin	90	100	30-152	11	50				
Endrin Aldehyde	89	94	10-152	5	35				
Endrin Ketone	100	119	10-160	17	50				
Heptachlor	90	147	16-152	47	50				
Heptachlor Epoxide	87	92	17-167	5	50				
Methoxychlor	116	231*	34-168	67*	50				
Batch number: 131660003A	Sample number(s): 7088268-7088269 UNSPK: P088258								
EFH (C12-C14)	92	85	49-123	8	20				
EFH (C15-C20)	106	174*	49-123	49*	20				
EFH (C21-C30)	108	1702*	49-123	176*	20				
EFH (C30-C40)	96	4133*	49-123	191*	20				
EFH (C8-C11)	80	75	49-123	5	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131670637001	Sample number(s): 7088268-7088269 UNSPK: P088258 BKG: P088258								
Aluminum	1829 (2)	1645 (2)	75-125	2	20	17,100	17,400	2	20
Antimony	66*	64*	75-125	3	20	0.685 J	0.621 J	10 (1)	20
Arsenic	93	90	75-125	1	20	6.46	6.04	7 (1)	20
Barium	96	97	75-125	1	20	54.3	52.3	4	20
Beryllium	100	100	75-125	0	20	0.667 J	0.669 J	0 (1)	20
Boron	94	95	75-125	1	20	2.35 J	2.03 J	15 (1)	20
Cadmium	81	82	75-125	2	20	0.971 U	0.971 U	0 (1)	20
Calcium	124	130*	75-125	1	20	1,510	1,510	0	20
Chromium	104	102	75-125	1	20	19.7	19.5	1	20
Cobalt	92	92	75-125	0	20	3.07	2.98	3 (1)	20
Copper	100	100	75-125	0	20	8.07	8.10	0 (1)	20
Iron	3374 (2)	-244 (2)	75-125	15	20	21,800	22,100	1	20
Lead	93	87	75-125	5	20	5.96	5.77	3 (1)	20
Lithium	99	98	75-125	0	20	21.4	22.2	4	20
Magnesium	241 (2)	165 (2)	75-125	3	20	4,250	4,320	2	20
Manganese	117	99	75-125	5	20	121	125	3	20
Molybdenum	91	91	75-125	0	20	0.316 J	0.225 J	33* (1)	20
Nickel	93	93	75-125	0	20	8.20	8.25	1 (1)	20
Phosphorus	103	86	75-125	8	20	107	100	6	20
Potassium	139*	130*	75-125	3	20	1,420	1,470	4	20
Sodium	98	94	75-125	2	20	834	842	1	20
Tin	86	86	75-125	0	20	2.91 J	2.88 J	1 (1)	20
Titanium	262 (2)	267 (2)	75-125	0	20	1,010	1,030	2	20
Vanadium	113	103	75-125	6	20	35.2	34.9	1	20
Zinc	100	97	75-125	2	20	39.0	39.5	1	20
Zirconium	98	97	75-125	1	20	2.92 J	2.89 J	1 (1)	20
Batch number: 131670637001A	Sample number(s): 7088268-7088269 UNSPK: P088258 BKG: P088258								
Silver	101	101	75-125	0	20	0.0297 J	0.0286 J	4 (1)	20
Strontium	93	88	75-125	2	20	17.5	16.0	9	20
Thallium	86	89	75-125	3	20	0.245	0.233	5 (1)	20
Batch number: 131670637001B	Sample number(s): 7088268-7088269 UNSPK: P088258 BKG: P088258								
Selenium	99	93	75-125	7	20	0.388 U	0.388 U	0 (1)	20
Batch number: 131670638001	Sample number(s): 7088268-7088269 UNSPK: P088258 BKG: P088258								
3a Mercury 7471A	108	109	65-135	2	20	0.0165 U	0.0137 J	200* (1)	20
Batch number: 13162039401B	Sample number(s): 7088268-7088269 BKG: P088258								
15a pH by 9045D						7.86	8.56	9*	3
Batch number: 13164162402A	Sample number(s): 7088264-7088269 BKG: 7088264								
14a Moisture Content by 160.3						5.7	6.6	14	20
14a Moisture Content by 160.3						5.7	6.6	14	20
14a Moisture Content by 160.3						5.7	6.6	14	20
Batch number: 13168008	Sample number(s): 7088268-7088269 UNSPK: P088258								
2378-TCDD	97	95	40-135	4	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
12378-PeCDD	98	99	40-135	1	20				
123478-HxCDD	105	107	40-135	1	20				
123678-HxCDD	101	101	40-135	2	20				
123789-HxCDD	103	102	40-135	3	20				
1234678-HpCDD	100	102	40-135	1	20				
OCDD	101	111	40-135	7	20				
2378-TCDF	98	97	40-135	3	20				
12378-PeCDF	100	100	40-135	2	20				
23478-PeCDF	102	104	40-135	0	20				
123478-HxCDF	103	104	40-135	1	20				
123678-HxCDF	99	101	40-135	0	20				
123789-HxCDF	102	102	40-135	2	20				
234678-HxCDF	104	102	40-135	5	20				
1234678-HpCDF	102	104	40-135	0	20				
1234789-HpCDF	102	102	40-135	2	20				
OCDF	100	101	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13164SLG026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7088268	60	65	67
Blank	87	98	100
LCS	89	99	101
MS	73	69	84
MSD	84	88	87
Limits:	54-129	61-134	55-129

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13172SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7088269	70	76	80
Blank	83	90	95
LCS	82	90	94
MS	61	72	71
MSD	43*	49*	49*
Limits:	54-129	61-134	55-129

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Surrogate Quality Control

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13165C20A

	Trifluorotoluene-F
7088263	85
Blank	86
LCS	118
LCSD	115
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13169A16A

	Trifluorotoluene-F
7088264	91
7088265	85
7088266	84
7088267	84
Blank	95
LCS	87
MS	85
MSD	84
Limits:	61-122

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 131650003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7088268	90	110
7088269	87	117
Blank	91	112
LCS	85	115
MS	76	99
MSD	84	115
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131660003A

	Chlorobenzene	Orthoterphenyl
7088268	87	89
7088269	81	79
Blank	98	99
LCS	102	106
MS	95	97
MSD	91	85
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13168008

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396059
Reported: 06/24/13 at 11:52 AM

Surrogate Quality Control

7088268	77	77	80	86	83	84
7088269	63	66	71	78	73	69
Blank	78	81	86	94	89	88
MS	64	69	75	83	76	73
MSD	77	81	81	83	81	84
OPR	57	60	62	70	65	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7088268	97	88	91	82	82	84
7088269	89	70	70	70	73	76
Blank	117	92	95	86	92	94
MS	99	79	80	75	78	80
MSD	87	84	82	83	77	80
OPR	91	66	69	67	67	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7088268	81	90	94	68	79	
7088269	73	78	81	57	67	
Blank	93	99	106	70	84	
MS	78	85	88	58	72	
MSD	80	83	82	72	79	
OPR	69	77	81	49	64	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1396059 7088263-69

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/10/2013
CarrierName: FedEx
AirbillNo: 799965626724

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130610-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-061013	6/10/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-776-SA5A-SB-6.0-7.0MS	6/10/13 11:30	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-1176-SA5A-SB-6.0-7.0	6/10/13 11:40	SO	None	2 - Encore	10 day																			X												
SL-777-SA5A-SB-0.0-0.5	6/10/13 14:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X								X			X											
SL-777-SA5A-SB-0.0-0.5	6/10/13 14:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-779-SA5A-SB-0.0-0.5	6/10/13 14:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X								X			X											
SL-779-SA5A-SB-0.0-0.5	6/10/13 14:00	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. Cooke

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	6/10/13	1600									
									Pat Gh	6/11/13	0925

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1396059

Client/Project: CDM Smith

Date of Receipt: 6/11/13

Time of Receipt: 0925

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.3	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/11/13 1010

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 25, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/12/2013
Group Number: 1396442
SDG: PH054
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-783-SA5A-SB-0.0-0.5 Soil	7089812
SL-783-SA5A-SB-0.0-0.5MS Soil	7089813
SL-783-SA5A-SB-0.0-0.5MSD Soil	7089814
SL-783-SA5A-SB-0.0-0.5SS Soil	7089815
SL-783-SA5A-SB-0.0-0.5IS Soil	7089816
SL-783-SA5A-SB-0.0-0.5PDS Soil	7089817
SL-783-SA5A-SB-0.0-0.5DUP Soil	7089818
SL-1183-SA5A-SB-0.0-0.5 Soil	7089819
SL-789-SA5A-SB-0.0-0.5 Soil	7089820
SL-789-SA5A-SB-5.0-6.0 Soil	7089821
TB-061113 Water	7089822
SL-785-SA5A-SB-0.0-0.5 Soil	7089823
SL-786-SA5A-SB-0.0-0.5 Soil	7089824
SL-787-SA5A-SB-0.0-0.5 Soil	7089825
SL-788-SA5A-SB-0.0-0.5 Soil	7089826

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	94		18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1

The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is also outside the QC acceptance limits in the associated matrix spike(s), indicating a matrix effect.

HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
04173	25a Formaldehyde by EPA 8315A	50-00-0	2,000	U	2,000	1,200	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	25		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		40.5	7.81	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.506	1
06935	Arsenic	7440-38-2	3.75	J	4.05	0.334	1
06946	Barium	7440-39-3	97.7		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.581	J	1.01	0.0678	1
07914	Boron	7440-42-8	4.93	J	10.1	0.840	1
06949	Cadmium	7440-43-9	0.712	J	1.01	0.0334	1
01650	Calcium	7440-70-2	2,740		20.2	4.07	1
06951	Chromium	7440-47-3	22.9		3.04	0.0891	1
06952	Cobalt	7440-48-4	5.77		1.01	0.0911	1
06953	Copper	7440-50-8	0.571	J	2.02	0.182	1
01654	Iron	7439-89-6	21,200		40.5	3.85	1
06955	Lead	7439-92-1	11.0		3.04	0.476	1
01656	Lithium	7439-93-2	22.5		4.0	0.56	1
01657	Magnesium	7439-95-4	4,000		10.1	1.75	1
06958	Manganese	7439-96-5	312		1.01	0.0840	1
06960	Molybdenum	7439-98-7	1.19	J	2.02	0.172	1
06961	Nickel	7440-02-0	13.9		2.02	0.111	1
10145	Phosphorus	7723-14-0	394		10.1	0.516	1
01662	Potassium	7440-09-7	3,360		101	13.7	1
01667	Sodium	7440-23-5	109		101	16.9	1
06969	Tin	7440-31-5	2.68	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,070		1.01	0.172	1
06971	Vanadium	7440-62-2	34.5		1.01	0.111	1
06972	Zinc	7440-66-6	64.4		4.05	0.202	1
10146	Zirconium	7440-67-7	2.13	J	5.06	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.0599	J	0.202	0.0202	2
06144	Strontium	7440-24-6	19.0		0.405	0.0344	2
06145	Thallium	7440-28-0	0.252		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0214		0.0166	0.010	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.49		0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 22.7 C.	n.a.	6.88	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.2	0.10	0.10	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0384	1
11031	12378-PeCDD	40321-76-4	0.514	JB	5.08	0.0571	1
11031	123478-HxCDD	39227-28-6	0.711	JB	5.08	0.0619	1
11031	123678-HxCDD	57653-85-7	1.80	JB	5.08	0.0697	1
11031	123789-HxCDD	19408-74-3	1.74	JB	5.08	0.0628	1
11031	1234678-HpCDD	35822-46-9	50.4	B	5.08	0.111	1
11031	OCDD	3268-87-9	1,170	B	10.2	0.0692	1
11031	2378-TCDF	51207-31-9	0.0889	JBQ	1.02	0.0455	1
11031	12378-PeCDF	57117-41-6	0.351	JBQ	5.08	0.0304	1
11031	23478-PeCDF	57117-31-4	0.177	JBQ	5.08	0.0301	1
11031	123478-HxCDF	70648-26-9	0.294	JB	5.08	0.0299	1
11031	123678-HxCDF	57117-44-9	0.305	JBQ	5.08	0.0306	1
11031	123789-HxCDF	72918-21-9	0.244	JB	5.08	0.0288	1
11031	234678-HxCDF	60851-34-5	0.324	JB	5.08	0.0273	1
11031	1234678-HpCDF	67562-39-4	3.98	JB	5.08	0.0280	1
11031	1234789-HpCDF	55673-89-7	0.413	JB	5.08	0.0396	1
11031	OCDF	39001-02-0	12.4	B	10.2	0.0357	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.93				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/21/2013 10:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 00:59	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 00:50	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 22:45	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 06:56	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/21/2013 17:02	John P Hook	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:25	John W Yanzuk II	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089812
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:43	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:43	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:43	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:43	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 21:55	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13169243201A	06/22/2013 13:44	William L Hamaker Jr	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089813
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	28		1.7	0.68	1
12969	Acenaphthylene	208-96-8	34		1.7	0.34	1
12969	Anthracene	120-12-7	30		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	30		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	29		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	27		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	15		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	39		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	34		18	6.1	1
12969	Chrysene	218-01-9	29		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	18		1.7	0.68	1
12969	Diethylphthalate	84-66-2	26		18	6.1	1
12969	Dimethylphthalate	131-11-3	31		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		18	6.1	1
12969	Fluoranthene	206-44-0	30		1.7	0.68	1
12969	Fluorene	86-73-7	29		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	29		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	28		1.7	0.68	1
12969	Naphthalene	91-20-3	28		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	210		18	6.1	1
12969	Phenanthrene	85-01-8	28		1.7	0.68	1
12969	Pyrene	129-00-0	32		1.7	0.68	1

The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is also outside the QC acceptance limits in the associated background.

HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	
04173	25a Formaldehyde by EPA 8315A	50-00-0	8,600		2,000	1,200	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	180		17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	190		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089813
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	3.9	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	22		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		40.9	7.88	1
06944	Antimony	7440-36-0	22.4		4.09	0.511	1
06935	Arsenic	7440-38-2	18.5		4.09	0.337	1
06946	Barium	7440-39-3	290		1.02	0.0337	1
06947	Beryllium	7440-41-7	5.73		1.02	0.0685	1
07914	Boron	7440-42-8	207		10.2	0.849	1
06949	Cadmium	7440-43-9	5.55		1.02	0.0337	1
01650	Calcium	7440-70-2	3,080		20.4	4.11	1
06951	Chromium	7440-47-3	58.8		3.07	0.0900	1
06952	Cobalt	7440-48-4	54.1		1.02	0.0920	1
06953	Copper	7440-50-8	16.0		2.04	0.184	1
01654	Iron	7439-89-6	20,000		40.9	3.89	1
06955	Lead	7439-92-1	23.1		3.07	0.481	1
01656	Lithium	7439-93-2	124		4.1	0.56	1
01657	Magnesium	7439-95-4	4,140		10.2	1.77	1
06958	Manganese	7439-96-5	322		1.02	0.0849	1
06960	Molybdenum	7439-98-7	204		2.04	0.174	1
06961	Nickel	7440-02-0	69.2		2.04	0.112	1
10145	Phosphorus	7723-14-0	449		10.2	0.521	1
01662	Potassium	7440-09-7	4,130		102	13.8	1
01667	Sodium	7440-23-5	1,100		102	17.1	1
06969	Tin	7440-31-5	382		10.2	0.225	1
06970	Titanium	7440-32-6	1,270		1.02	0.174	1
06971	Vanadium	7440-62-2	86.2		1.02	0.112	1
06972	Zinc	7440-66-6	103		4.09	0.204	1
10146	Zirconium	7440-67-7	102		5.11	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.84		0.409	0.102	2
06142	Silver	7440-22-4	14.6		0.204	0.0204	2
06144	Strontium	7440-24-6	41.1		0.409	0.0348	2
06145	Thallium	7440-28-0	0.940		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.185		0.0163	0.0098	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089813
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.4	B	1.01	0.0450	1
11031	12378-PeCDD	40321-76-4	97.3	B	5.05	0.0464	1
11031	123478-HxCDD	39227-28-6	97.9	B	5.05	0.0401	1
11031	123678-HxCDD	57653-85-7	98.0	B	5.05	0.0439	1
11031	123789-HxCDD	19408-74-3	95.9	B	5.05	0.0439	1
11031	1234678-HpCDD	35822-46-9	97.8	B	5.05	0.0553	1
11031	OCDD	3268-87-9	271	B	10.1	0.0357	1
11031	2378-TCDF	51207-31-9	19.5	B	1.01	0.0361	1
11031	12378-PeCDF	57117-41-6	95.9	B	5.05	0.0370	1
11031	23478-PeCDF	57117-31-4	99.0	B	5.05	0.0351	1
11031	123478-HxCDF	70648-26-9	99.2	B	5.05	0.0375	1
11031	123678-HxCDF	57117-44-9	101	B	5.05	0.0354	1
11031	123789-HxCDF	72918-21-9	96.0	B	5.05	0.0392	1
11031	234678-HxCDF	60851-34-5	101	B	5.05	0.0334	1
11031	1234678-HpCDF	67562-39-4	96.9	B	5.05	0.0308	1
11031	1234789-HpCDF	55673-89-7	96.3	B	5.05	0.0443	1
11031	OCDF	39001-02-0	190	B	10.1	0.0349	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	93	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089813
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MS

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/21/2013 11:00	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 01:08	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 01:09	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 23:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 07:53	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/21/2013 17:14	John P Hook	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:37	John W Yanzuk II	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089813
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:50	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:50	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:50	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:50	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:02	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089814
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	28		1.7	0.68	1
12969	Acenaphthylene	208-96-8	33		1.7	0.34	1
12969	Anthracene	120-12-7	30		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	29		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	28		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	27		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	14		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	38		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	34		18	6.1	1
12969	Chrysene	218-01-9	28		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	18		1.7	0.68	1
12969	Diethylphthalate	84-66-2	22		18	6.1	1
12969	Dimethylphthalate	131-11-3	31		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.1	1
12969	Fluoranthene	206-44-0	29		1.7	0.68	1
12969	Fluorene	86-73-7	29		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	28		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	28		1.7	0.68	1
12969	Naphthalene	91-20-3	28		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	130		18	6.1	1
12969	Phenanthrene	85-01-8	28		1.7	0.68	1
12969	Pyrene	129-00-0	31		1.7	0.68	1

The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is also outside the QC acceptance limits in the associated background.

HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	
04173	25a Formaldehyde by EPA 8315A	50-00-0	9,100		2,000	1,200	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	170		17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	170		17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089814
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	4.0	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	18		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	42		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		40.9	7.88	1
06944	Antimony	7440-36-0	21.0		4.09	0.511	1
06935	Arsenic	7440-38-2	18.5		4.09	0.337	1
06946	Barium	7440-39-3	299		1.02	0.0337	1
06947	Beryllium	7440-41-7	5.81		1.02	0.0685	1
07914	Boron	7440-42-8	207		10.2	0.849	1
06949	Cadmium	7440-43-9	5.60		1.02	0.0337	1
01650	Calcium	7440-70-2	2,890		20.4	4.11	1
06951	Chromium	7440-47-3	40.7		3.07	0.0900	1
06952	Cobalt	7440-48-4	54.9		1.02	0.0920	1
06953	Copper	7440-50-8	19.2		2.04	0.184	1
01654	Iron	7439-89-6	20,600		40.9	3.89	1
06955	Lead	7439-92-1	23.5		3.07	0.481	1
01656	Lithium	7439-93-2	125		4.1	0.56	1
01657	Magnesium	7439-95-4	4,220		10.2	1.77	1
06958	Manganese	7439-96-5	344		1.02	0.0849	1
06960	Molybdenum	7439-98-7	205		2.04	0.174	1
06961	Nickel	7440-02-0	62.1		2.04	0.112	1
10145	Phosphorus	7723-14-0	455		10.2	0.521	1
01662	Potassium	7440-09-7	4,290		102	13.8	1
01667	Sodium	7440-23-5	1,100		102	17.1	1
06969	Tin	7440-31-5	379		10.2	0.225	1
06970	Titanium	7440-32-6	1,300		1.02	0.174	1
06971	Vanadium	7440-62-2	87.9		1.02	0.112	1
06972	Zinc	7440-66-6	110		4.09	0.204	1
10146	Zirconium	7440-67-7	101		5.11	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.76		0.409	0.102	2
06142	Silver	7440-22-4	14.3		0.204	0.0204	2
06144	Strontium	7440-24-6	38.2		0.409	0.0348	2
06145	Thallium	7440-28-0	0.893		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.165		0.0162	0.0097	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089814
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.3	B	0.997	0.0565	1
11031	12378-PeCDD	40321-76-4	97.3	B	4.98	0.0624	1
11031	123478-HxCDD	39227-28-6	94.3	B	4.98	0.0577	1
11031	123678-HxCDD	57653-85-7	97.0	B	4.98	0.0627	1
11031	123789-HxCDD	19408-74-3	94.5	B	4.98	0.0590	1
11031	1234678-HpCDD	35822-46-9	101	B	4.98	0.0685	1
11031	OCDD	3268-87-9	358	B	9.97	0.0486	1
11031	2378-TCDF	51207-31-9	18.5	B	0.997	0.0530	1
11031	12378-PeCDF	57117-41-6	95.8	B	4.98	0.0482	1
11031	23478-PeCDF	57117-31-4	98.5	B	4.98	0.0461	1
11031	123478-HxCDF	70648-26-9	99.5	B	4.98	0.0621	1
11031	123678-HxCDF	57117-44-9	98.5	B	4.98	0.0564	1
11031	123789-HxCDF	72918-21-9	95.0	B	4.98	0.0670	1
11031	234678-HxCDF	60851-34-5	96.9	B	4.98	0.0529	1
11031	1234678-HpCDF	67562-39-4	97.3	B	4.98	0.0465	1
11031	1234789-HpCDF	55673-89-7	94.7	B	4.98	0.0646	1
11031	OCDF	39001-02-0	189	B	9.97	0.0525	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089814
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MSD

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/21/2013 11:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 01:16	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 01:27	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 23:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 08:50	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/21/2013 17:18	John P Hook	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:41	John W Yanzuk II	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089814
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:52	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:52	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:52	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:52	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:04	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5SS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089815
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	42.6	2.0	0.72	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13169243201A	06/22/2013 15:21	William L Hamaker Jr	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5IS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089816
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1,000	40.9	14.3	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13169243201A	06/22/2013 15:28	William L Hamaker Jr	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5PDS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089817
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		mg/kg	mg/kg	mg/kg	
05892	2a Chromium VI by EPA 7199	18540-29-9	41.7	4.1	1.4	10
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.2	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	3	13169243201A	06/25/2013 13:58	William L Hamaker Jr	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089818
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		40.9	7.88	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.511	1
06935	Arsenic	7440-38-2	3.71	J	4.09	0.337	1
06946	Barium	7440-39-3	98.8		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.588	J	1.02	0.0685	1
07914	Boron	7440-42-8	5.25	J	10.2	0.849	1
06949	Cadmium	7440-43-9	0.681	J	1.02	0.0337	1
01650	Calcium	7440-70-2	3,240		20.4	4.11	1
06951	Chromium	7440-47-3	20.3		3.07	0.0900	1
06952	Cobalt	7440-48-4	5.50		1.02	0.0920	1
06953	Copper	7440-50-8	0.806	J	2.04	0.184	1
01654	Iron	7439-89-6	21,700		40.9	3.89	1
06955	Lead	7439-92-1	11.6		3.07	0.481	1
01656	Lithium	7439-93-2	22.3		4.1	0.56	1
01657	Magnesium	7439-95-4	4,150		10.2	1.77	1
06958	Manganese	7439-96-5	307		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.594	J	2.04	0.174	1
06961	Nickel	7440-02-0	12.2		2.04	0.112	1
10145	Phosphorus	7723-14-0	414		10.2	0.521	1
01662	Potassium	7440-09-7	3,420		102	13.8	1
01667	Sodium	7440-23-5	112		102	17.1	1
06969	Tin	7440-31-5	2.62	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,090		1.02	0.174	1
06971	Vanadium	7440-62-2	34.5		1.02	0.112	1
06972	Zinc	7440-66-6	64.0		4.09	0.204	1
10146	Zirconium	7440-67-7	2.39	J	5.11	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.140	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0633	J	0.204	0.0204	2
06144	Strontium	7440-24-6	20.6		0.409	0.0348	2
06145	Thallium	7440-28-0	0.259		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0278		0.0169	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	2.2		0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.91		0.0100	0.0100	1
	The pH was measured in water at 22.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.1		0.10	0.10	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089818
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/21/2013 17:10	John P Hook	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:33	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:48	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:48	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:48	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:48	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:00	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1

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

Sample Description: SL-783-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089818
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL783 SDG#: PH054-01DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13169243201A	06/22/2013 13:52	William L Hamaker Jr	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.8		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.1	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J	19	6.2	1
12969	Fluoranthene	206-44-0	1.2	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	7.0	J	19	6.2	1
12969	Phenanthrene	85-01-8	0.79	J	1.7	0.69	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.69	1
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	
04173	25a Formaldehyde by EPA 8315A	50-00-0	2,100	U	2,100	1,200	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	18	U	18	3.4	1
10592	PCB-1221	11104-28-2	18	U	18	5.3	1
10592	PCB-1232	11141-16-5	18	U	18	4.2	1
10592	PCB-1242	53469-21-9	18	U	18	4.2	1
10592	PCB-1248	12672-29-6	18	U	18	3.4	1
10592	PCB-1254	11097-69-1	18	U	18	4.5	1
10592	PCB-1260	11096-82-5	18	U	18	4.0	1
10592	PCB-1262	37324-23-5	18	U	18	3.4	1
10592	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		41.3	7.96	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.517	1
06935	Arsenic	7440-38-2	5.67		4.13	0.341	1
06946	Barium	7440-39-3	94.4		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.792	J	1.03	0.0692	1
07914	Boron	7440-42-8	4.22	J	10.3	0.857	1
06949	Cadmium	7440-43-9	0.639	J	1.03	0.0341	1
01650	Calcium	7440-70-2	2,480		20.7	4.15	1
06951	Chromium	7440-47-3	19.3		3.10	0.0909	1
06952	Cobalt	7440-48-4	10.6		1.03	0.0930	1
06953	Copper	7440-50-8	12.4		2.07	0.186	1
01654	Iron	7439-89-6	27,800		41.3	3.93	1
06955	Lead	7439-92-1	8.30		3.10	0.517	1
01656	Lithium	7439-93-2	26.9		4.1	0.57	1
01657	Magnesium	7439-95-4	5,120		10.3	1.79	1
06958	Manganese	7439-96-5	357		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.442	J	2.07	0.176	1
06961	Nickel	7440-02-0	12.2		2.07	0.114	1
10145	Phosphorus	7723-14-0	429		10.3	0.527	1
01662	Potassium	7440-09-7	3,470		103	13.9	1
01667	Sodium	7440-23-5	112		103	17.3	1
06969	Tin	7440-31-5	3.32	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,150		1.03	0.176	1
06971	Vanadium	7440-62-2	38.0		1.03	0.114	1
06972	Zinc	7440-66-6	66.9		4.13	0.207	1
10146	Zirconium	7440-67-7	1.41	J	5.17	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.177	J	0.413	0.103	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0207	2
06144	Strontium	7440-24-6	22.4		0.413	0.0351	2
06145	Thallium	7440-28-0	0.283		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.27	J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.68		0.0100	0.0100	1
	The pH was measured in water at 22.8 C.						

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.2	0.10	0.10	1

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

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0482 JBQ	1.03	0.0278	1
11031	12378-PeCDD	40321-76-4	0.138 JBQ	5.17	0.0330	1
11031	123478-HxCDD	39227-28-6	0.196 JBQ	5.17	0.0371	1
11031	123678-HxCDD	57653-85-7	0.373 JB	5.17	0.0380	1
11031	123789-HxCDD	19408-74-3	0.354 JBQ	5.17	0.0363	1
11031	1234678-HpCDD	35822-46-9	5.97 B	5.17	0.0419	1
11031	OCDD	3268-87-9	58.8 B	10.3	0.0384	1
11031	2378-TCDF	51207-31-9	0.0352 JBQ	1.03	0.0273	1
11031	12378-PeCDF	57117-41-6	0.146 JBQ	5.17	0.0196	1
11031	23478-PeCDF	57117-31-4	0.123 JBQ	5.17	0.0200	1
11031	123478-HxCDF	70648-26-9	0.134 JBQ	5.17	0.0208	1
11031	123678-HxCDF	57117-44-9	0.156 JBQ	5.17	0.0195	1
11031	123789-HxCDF	72918-21-9	0.210 JB	5.17	0.0201	1
11031	234678-HxCDF	60851-34-5	0.175 JBQ	5.17	0.0184	1
11031	1234678-HpCDF	67562-39-4	0.578 JB	5.17	0.0147	1
11031	1234789-HpCDF	55673-89-7	0.209 JBQ	5.17	0.0240	1
11031	OCDF	39001-02-0	1.14 JB	10.3	0.0344	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.142			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/25/2013 05:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 01:25	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 01:46	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 16:32	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 09:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 17:26	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 10:47	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:48	John W Yanzuk II	1

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

Sample Description: SL-1183-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089819
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 10:15 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1183 SDG#: PH054-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:57	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:57	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:57	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:57	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:06	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13169243201A	06/22/2013 15:57	William L Hamaker Jr	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.92	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	28		1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	21		1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	32		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	18		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	11		1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	15		1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	6.5	J	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	33		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	4.4		1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	18	6.1	1
12969	Fluoranthene	206-44-0	25		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	11		1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	6.9	J	18	6.1	1
12969	Phenanthrene	85-01-8	3.3		1.7	0.67	1
12969	Pyrene	129-00-0	24		1.7	0.67	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
04173	25a Formaldehyde by EPA 8315A	50-00-0	2,000	U	2,000	1,200	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	26		10	4.0	1

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		40.1	7.73	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.501	1
06935	Arsenic	7440-38-2	3.87	J	4.01	0.331	1
06946	Barium	7440-39-3	110		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.606	J	1.00	0.0671	1
07914	Boron	7440-42-8	5.38	J	10.0	0.832	1
06949	Cadmium	7440-43-9	0.625	J	1.00	0.0331	1
01650	Calcium	7440-70-2	2,460		20.0	4.03	1
06951	Chromium	7440-47-3	19.4		3.01	0.0882	1
06952	Cobalt	7440-48-4	5.46		1.00	0.0902	1
06953	Copper	7440-50-8	9.36		2.00	0.180	1
01654	Iron	7439-89-6	21,200		40.1	3.81	1
06955	Lead	7439-92-1	7.96		3.01	0.501	1
01656	Lithium	7439-93-2	23.6		4.0	0.55	1
01657	Magnesium	7439-95-4	4,270		10.0	1.73	1
06958	Manganese	7439-96-5	317		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.534	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.8		2.00	0.110	1
10145	Phosphorus	7723-14-0	461		10.0	0.511	1
01662	Potassium	7440-09-7	3,480		100	13.5	1
01667	Sodium	7440-23-5	104		100	16.7	1
06969	Tin	7440-31-5	2.51	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,140		1.00	0.170	1
06971	Vanadium	7440-62-2	35.1		1.00	0.110	1
06972	Zinc	7440-66-6	56.1		4.01	0.200	1
10146	Zirconium	7440-67-7	2.07	J	5.01	0.832	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.168	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0866	J	0.200	0.0200	2
06144	Strontium	7440-24-6	37.0		0.401	0.0341	2
06145	Thallium	7440-28-0	0.436		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0120	J	0.0166	0.010	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.54		0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.55		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	1.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0310	1
11031	12378-PeCDD	40321-76-4	0.366	JB	5.04	0.0427	1
11031	123478-HxCDD	39227-28-6	0.556	JBQ	5.04	0.0465	1
11031	123678-HxCDD	57653-85-7	1.22	JB	5.04	0.0508	1
11031	123789-HxCDD	19408-74-3	1.28	JB	5.04	0.0488	1
11031	1234678-HpCDD	35822-46-9	33.4	B	5.04	0.0707	1
11031	OCDD	3268-87-9	721	B	10.1	0.0535	1
11031	2378-TCDF	51207-31-9	0.0904	JB	1.01	0.0381	1
11031	12378-PeCDF	57117-41-6	0.293	JBQ	5.04	0.0245	1
11031	23478-PeCDF	57117-31-4	0.219	JB	5.04	0.0253	1
11031	123478-HxCDF	70648-26-9	0.252	JBQ	5.04	0.0285	1
11031	123678-HxCDF	57117-44-9	0.177	JB	5.04	0.0259	1
11031	123789-HxCDF	72918-21-9	0.215	JB	5.04	0.0326	1
11031	234678-HxCDF	60851-34-5	0.246	JB	5.04	0.0227	1
11031	1234678-HpCDF	67562-39-4	3.18	JB	5.04	0.0200	1
11031	1234789-HpCDF	55673-89-7	0.222	JBQ	5.04	0.0297	1
11031	OCDF	39001-02-0	10.7	B	10.1	0.0331	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.34				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	110	25 - 164
13C12-12378-PeCDD	119	25 - 181
13C12-123478-HxCDD	126	32 - 141
13C12-123678-HxCDD	124	28 - 130
13C12-123789-HxCDD	124	28 - 130
13C12-1234678-HpCDD	122	23 - 140
13C12-OCDD	121	17 - 157
13C12-2378-TCDF	103	24 - 169
13C12-12378-PeCDF	119	24 - 185
13C12-23478-PeCDF	114	21 - 178
13C12-123478-HxCDF	113	26 - 152
13C12-123678-HxCDF	119	26 - 123
13C12-234678-HxCDF	130	28 - 136
13C12-123789-HxCDF	118	29 - 147
13C12-1234678-HpCDF	135	28 - 143
13C12-1234789-HpCDF	111	26 - 138
13C12-OCDF	106	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 09:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 01:33	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 02:04	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/19/2013 00:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 11:10	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 17:42	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 10:51	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 22:52	John W Yanzuk II	1

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

Sample Description: SL-789-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089820
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:00 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-0 SDG#: PH054-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 08:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 08:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 08:59	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 08:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:08	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13169243201A	06/22/2013 16:11	William L Hamaker Jr	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	J	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	0.81	J	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.9		1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.3	J	19	6.4	1
12969	Fluoranthene	206-44-0	1.3	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	7.3	J	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.2	J	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.99
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
04173	25a Formaldehyde by EPA 8315A	50-00-0	2,100	U	2,100	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	2.1	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		41.7	8.04	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.521	1
06935	Arsenic	7440-38-2	3.70	J	4.17	0.344	1
06946	Barium	7440-39-3	70.3		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.671	J	1.04	0.0699	1
07914	Boron	7440-42-8	5.01	J	10.4	0.866	1
06949	Cadmium	7440-43-9	0.540	J	1.04	0.0344	1
01650	Calcium	7440-70-2	2,370		20.9	4.19	1
06951	Chromium	7440-47-3	22.1		3.13	0.0918	1
06952	Cobalt	7440-48-4	4.12		1.04	0.0939	1
06953	Copper	7440-50-8	6.45		2.09	0.188	1
01654	Iron	7439-89-6	23,300		41.7	3.96	1
06955	Lead	7439-92-1	6.24		3.13	0.521	1
01656	Lithium	7439-93-2	23.6		4.2	0.57	1
01657	Magnesium	7439-95-4	4,450		10.4	1.80	1
06958	Manganese	7439-96-5	178		1.04	0.0866	1
06960	Molybdenum	7439-98-7	0.245	J	2.09	0.177	1
06961	Nickel	7440-02-0	9.35		2.09	0.115	1
10145	Phosphorus	7723-14-0	126		10.4	0.532	1
01662	Potassium	7440-09-7	1,570		104	14.1	1
01667	Sodium	7440-23-5	503		104	17.4	1
06969	Tin	7440-31-5	2.79	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,170		1.04	0.177	1
06971	Vanadium	7440-62-2	37.1		1.04	0.115	1
06972	Zinc	7440-66-6	41.5		4.17	0.209	1
10146	Zirconium	7440-67-7	1.62	J	5.21	0.866	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.417	U	0.417	0.104	2
06142	Silver	7440-22-4	0.0830	J	0.209	0.0209	2
06144	Strontium	7440-24-6	25.4		0.417	0.0355	2
06145	Thallium	7440-28-0	0.241		0.209	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.49		0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 22.6 C.	n.a.	7.32	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	6.0	0.10	0.10	1

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0456 JBQ	1.02	0.0412	1
11031	12378-PeCDD	40321-76-4	0.144 JBQ	5.10	0.0480	1
11031	123478-HxCDD	39227-28-6	0.0770 JB	5.10	0.0261	1
11031	123678-HxCDD	57653-85-7	0.112 JBQ	5.10	0.0304	1
11031	123789-HxCDD	19408-74-3	0.144 JB	5.10	0.0301	1
11031	1234678-HpCDD	35822-46-9	1.90 JB	5.10	0.0450	1
11031	OCDD	3268-87-9	39.7 B	10.2	0.0355	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0398	1
11031	12378-PeCDF	57117-41-6	0.124 JB	5.10	0.0253	1
11031	23478-PeCDF	57117-31-4	0.0792 JBQ	5.10	0.0252	1
11031	123478-HxCDF	70648-26-9	0.0958 JBQ	5.10	0.0195	1
11031	123678-HxCDF	57117-44-9	0.0894 JBQ	5.10	0.0189	1
11031	123789-HxCDF	72918-21-9	0.106 JB	5.10	0.0201	1
11031	234678-HxCDF	60851-34-5	0.0770 JB	5.10	0.0165	1
11031	1234678-HpCDF	67562-39-4	0.278 JB	5.10	0.0114	1
11031	1234789-HpCDF	55673-89-7	0.0569 JBQ	5.10	0.0181	1
11031	OCDF	39001-02-0	0.629 JB	10.2	0.0343	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0781			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	105	32 - 141
13C12-123678-HxCDD	96	28 - 130
13C12-123789-HxCDD	94	28 - 130
13C12-1234678-HpCDD	101	23 - 140
13C12-OCDD	104	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	112	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 10:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 16:28	Laura M Krieger	25.99
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316331393	06/12/2013 14:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316331393	06/12/2013 14:34	Mitchell R Washel	n.a.
04173	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	131680004A	06/20/2013 01:42	James H Place	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 02:23	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	131680004A	06/17/2013 14:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 17:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 12:03	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 17:50	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 10:55	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1

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

Sample Description: SL-789-SA5A-SB-5.0-6.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089821
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 09:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789-5 SDG#: PH054-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 23:03	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 09:06	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 09:06	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 09:06	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 09:06	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:10	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13169243201A	06/22/2013 17:02	William L Hamaker Jr	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13169243201A	06/18/2013 19:35	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: TB-061113 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7089822
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 08:00

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

789TB SDG#: PH054-05TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13165C20A	06/17/2013 14:15	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	13165C20A	06/17/2013 14:15	Marie D John	1

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.52	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.1		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	71		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	100		18	6.1	1
12969	Fluoranthene	206-44-0	5.0		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	32		18	6.1	1
12969	Phenanthrene	85-01-8	2.1		1.7	0.68	1
12969	Pyrene	129-00-0	4.0		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	10		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	25		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		40.5	7.81	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.507	1
06935	Arsenic	7440-38-2	3.41	J	4.05	0.334	1
06946	Barium	7440-39-3	103		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.578	J	1.01	0.0679	1
07914	Boron	7440-42-8	5.43	J	10.1	0.841	1
06949	Cadmium	7440-43-9	0.607	J	1.01	0.0334	1
01650	Calcium	7440-70-2	2,060		20.3	4.07	1
06951	Chromium	7440-47-3	17.3		3.04	0.0892	1
06952	Cobalt	7440-48-4	5.31		1.01	0.0912	1
06953	Copper	7440-50-8	9.95		2.03	0.182	1
01654	Iron	7439-89-6	18,400		40.5	3.85	1
06955	Lead	7439-92-1	8.06		3.04	0.507	1
01656	Lithium	7439-93-2	19.6		4.1	0.56	1

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,550		10.1	1.75	1
06958	Manganese	7439-96-5	313		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.396	J	2.03	0.172	1
06961	Nickel	7440-02-0	11.6		2.03	0.111	1
10145	Phosphorus	7723-14-0	358		10.1	0.517	1
01662	Potassium	7440-09-7	3,070		101	13.7	1
01667	Sodium	7440-23-5	99.9	J	101	16.9	1
06969	Tin	7440-31-5	2.42	J	10.1	0.223	1
06970	Titanium	7440-32-6	964		1.01	0.172	1
06971	Vanadium	7440-62-2	31.7		1.01	0.111	1
06972	Zinc	7440-66-6	47.7		4.05	0.203	1
10146	Zirconium	7440-67-7	2.04	J	5.07	0.841	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.181	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0534	J	0.203	0.0203	2
06144	Strontium	7440-24-6	31.1		0.405	0.0344	2
06145	Thallium	7440-28-0	0.335		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0115	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.22		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

CAT No.	Analysis Name		CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	2378-TCDD		1746-01-6	0.0501	JBQ	0.992	0.0361	1
11031	12378-PeCDD		40321-76-4	0.563	JB	4.96	0.0530	1
11031	123478-HxCDD		39227-28-6	0.710	JBQ	4.96	0.0623	1
11031	123678-HxCDD		57653-85-7	2.17	JB	4.96	0.0721	1
11031	123789-HxCDD		19408-74-3	2.02	JB	4.96	0.0686	1
11031	1234678-HpCDD		35822-46-9	65.6	B	4.96	0.110	1
11031	OCDD		3268-87-9	1,860	B	9.92	0.0815	1
11031	2378-TCDF		51207-31-9	0.0508	JBQ	0.992	0.0455	1
11031	12378-PeCDF		57117-41-6	0.278	JBQ	4.96	0.0282	1
11031	23478-PeCDF		57117-31-4	0.174	JBQ	4.96	0.0280	1
11031	123478-HxCDF		70648-26-9	0.298	JBQ	4.96	0.0305	1
11031	123678-HxCDF		57117-44-9	0.226	JB	4.96	0.0303	1
11031	123789-HxCDF		72918-21-9	0.307	JBQ	4.96	0.0289	1
11031	234678-HxCDF		60851-34-5	0.253	JB	4.96	0.0272	1
11031	1234678-HpCDF		67562-39-4	3.68	JB	4.96	0.0197	1
11031	1234789-HpCDF		55673-89-7	0.280	JBQ	4.96	0.0293	1
11031	OCDF		39001-02-0	11.9	B	9.92	0.0379	1
Toxic Equivalents	**EPA 1613B**			ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0		n.a.	2.28				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 10:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 21:42	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 13:00	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 17:58	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 10:59	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 23:07	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 09:09	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 09:09	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 09:09	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 09:09	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:16	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1

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

Sample Description: SL-785-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089823
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:05 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL785 SDG#: PH054-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.54	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.80	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.0	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	4.1		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.74	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	0.76	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	2.6		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.5	J	19	6.2	1
12969	Fluoranthene	206-44-0	3.4		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	7.9	J	19	6.2	1
12969	Phenanthrene	85-01-8	1.6	J	1.7	0.69	1
12969	Pyrene	129-00-0	2.5		1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	17		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	35		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		39.6	7.63	1
06944	Antimony	7440-36-0	3.96	U	3.96	0.495	1
06935	Arsenic	7440-38-2	2.82	J	3.96	0.327	1
06946	Barium	7440-39-3	103		0.990	0.0327	1
06947	Beryllium	7440-41-7	0.507	J	0.990	0.0663	1
07914	Boron	7440-42-8	4.66	J	9.90	0.822	1
06949	Cadmium	7440-43-9	0.660	J	0.990	0.0327	1
01650	Calcium	7440-70-2	1,900		19.8	3.98	1
06951	Chromium	7440-47-3	18.7		2.97	0.0871	1
06952	Cobalt	7440-48-4	5.23		0.990	0.0891	1
06953	Copper	7440-50-8	9.61		1.98	0.178	1
01654	Iron	7439-89-6	19,700		39.6	3.76	1
06955	Lead	7439-92-1	10.3		2.97	0.495	1
01656	Lithium	7439-93-2	21.1		4.0	0.54	1

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,020		9.90	1.71	1
06958	Manganese	7439-96-5	299		0.990	0.0822	1
06960	Molybdenum	7439-98-7	0.313	J	1.98	0.168	1
06961	Nickel	7440-02-0	12.0		1.98	0.109	1
10145	Phosphorus	7723-14-0	464		9.90	0.505	1
01662	Potassium	7440-09-7	3,320		99.0	13.4	1
01667	Sodium	7440-23-5	88.0	J	99.0	16.5	1
06969	Tin	7440-31-5	2.50	J	9.90	0.218	1
06970	Titanium	7440-32-6	936		0.990	0.168	1
06971	Vanadium	7440-62-2	31.9		0.990	0.109	1
06972	Zinc	7440-66-6	59.3		3.96	0.198	1
10146	Zirconium	7440-67-7	1.23	J	4.95	0.822	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.131	J	0.396	0.0990	2
06142	Silver	7440-22-4	0.0451	J	0.198	0.0198	2
06144	Strontium	7440-24-6	19.8		0.396	0.0337	2
06145	Thallium	7440-28-0	0.256		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.47		0.0100	0.0100	1
	The pH was measured in water at 22.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0778	JB	1.02	0.0437	1
11031	12378-PeCDD	40321-76-4	0.624	JB	5.09	0.0610	1
11031	123478-HxCDD	39227-28-6	0.884	JB	5.09	0.0785	1
11031	123678-HxCDD	57653-85-7	2.18	JB	5.09	0.0803	1
11031	123789-HxCDD	19408-74-3	2.22	JB	5.09	0.0739	1
11031	1234678-HpCDD	35822-46-9	52.9	B	5.09	0.106	1
11031	OCDD	3268-87-9	1,140	B	10.2	0.0652	1
11031	2378-TCDF	51207-31-9	0.193	JB	1.02	0.0618	1
11031	12378-PeCDF	57117-41-6	0.698	JB	5.09	0.0340	1
11031	23478-PeCDF	57117-31-4	0.367	JB	5.09	0.0360	1
11031	123478-HxCDF	70648-26-9	0.461	JB	5.09	0.0389	1
11031	123678-HxCDF	57117-44-9	0.348	JBQ	5.09	0.0343	1
11031	123789-HxCDF	72918-21-9	0.424	JBQ	5.09	0.0460	1
11031	234678-HxCDF	60851-34-5	0.325	JB	5.09	0.0347	1
11031	1234678-HpCDF	67562-39-4	3.69	JB	5.09	0.0212	1
11031	1234789-HpCDF	55673-89-7	0.404	JB	5.09	0.0364	1
11031	OCDF	39001-02-0	11.1	B	10.2	0.0382	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.37				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 11:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 22:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 16:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 18:06	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 11:03	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 23:11	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 09:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 09:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 09:11	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 09:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:18	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1

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

Sample Description: SL-786-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089824
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 13:20 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL786 SDG#: PH054-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	0.49	J	1.7	0.34	1
12969	Anthracene	120-12-7	0.85	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.80	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	0.91	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	4.1		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.1	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	4.5		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	32		19	6.2	1
12969	Fluoranthene	206-44-0	16		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	8.8	J	19	6.2	1
12969	Phenanthrene	85-01-8	15		1.7	0.69	1
12969	Pyrene	129-00-0	11		1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	2.6	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	7.0	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		41.2	7.94	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.515	1
06935	Arsenic	7440-38-2	3.97	J	4.12	0.340	1
06946	Barium	7440-39-3	108		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.681	J	1.03	0.0690	1
07914	Boron	7440-42-8	5.37	J	10.3	0.855	1
06949	Cadmium	7440-43-9	0.582	J	1.03	0.0340	1
01650	Calcium	7440-70-2	1,940		20.6	4.14	1
06951	Chromium	7440-47-3	19.3		3.09	0.0906	1
06952	Cobalt	7440-48-4	5.94		1.03	0.0927	1
06953	Copper	7440-50-8	8.70		2.06	0.185	1
01654	Iron	7439-89-6	20,900		41.2	3.91	1
06955	Lead	7439-92-1	6.60		3.09	0.515	1
01656	Lithium	7439-93-2	21.4		4.1	0.57	1

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,980		10.3	1.78	1
06958	Manganese	7439-96-5	311		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.349	J	2.06	0.175	1
06961	Nickel	7440-02-0	12.9		2.06	0.113	1
10145	Phosphorus	7723-14-0	310		10.3	0.525	1
01662	Potassium	7440-09-7	2,900		103	13.9	1
01667	Sodium	7440-23-5	101	J	103	17.2	1
06969	Tin	7440-31-5	2.48	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,080		1.03	0.175	1
06971	Vanadium	7440-62-2	36.3		1.03	0.113	1
06972	Zinc	7440-66-6	47.7		4.12	0.206	1
10146	Zirconium	7440-67-7	2.09	J	5.15	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.169	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0504	J	0.206	0.0206	2
06144	Strontium	7440-24-6	32.8		0.412	0.0350	2
06145	Thallium	7440-28-0	0.406		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.50		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.226	JB	1.02	0.0444	1
11031	12378-PeCDD	40321-76-4	2.66	JB	5.08	0.0851	1
11031	123478-HxCDD	39227-28-6	4.03	JB	5.08	0.0669	1
11031	123678-HxCDD	57653-85-7	12.5	B	5.08	0.0794	1
11031	123789-HxCDD	19408-74-3	9.97	B	5.08	0.0805	1
11031	1234678-HpCDD	35822-46-9	356	B	5.08	0.237	1
11031	OCDD	3268-87-9	9,790	EB	10.2	0.0976	1
11031	2378-TCDF	51207-31-9	0.142	JB	1.02	0.0395	1
11031	12378-PeCDF	57117-41-6	0.574	JB	5.08	0.0313	1
11031	23478-PeCDF	57117-31-4	0.354	JB	5.08	0.0291	1
11031	123478-HxCDF	70648-26-9	1.42	JB	5.08	0.0325	1
11031	123678-HxCDF	57117-44-9	0.569	JBQ	5.08	0.0298	1
11031	123789-HxCDF	72918-21-9	0.541	JBQ	5.08	0.0321	1
11031	234678-HxCDF	60851-34-5	0.891	JB	5.08	0.0250	1
11031	1234678-HpCDF	67562-39-4	20.3	B	5.08	0.0275	1
11031	1234789-HpCDF	55673-89-7	0.919	JB	5.08	0.0459	1
11031	OCDF	39001-02-0	68.9	B	10.2	0.0468	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	12.6				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	98	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	110	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 11:57	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 17:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 17:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 18:14	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/24/2013 11:07	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 23:15	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 09:14	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 09:14	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 09:14	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 09:14	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:20	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1

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

Sample Description: SL-787-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089825
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 12:30 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL787 SDG#: PH054-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.4	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	4.2		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.75	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	12	J	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.5		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	62		18	6.0	1
12969	Fluoranthene	206-44-0	2.3		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	57		18	6.0	1
12969	Phenanthrene	85-01-8	0.92	J	1.7	0.67	1
12969	Pyrene	129-00-0	2.2		1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	45		17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	32		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		38.8	7.47	1
06944	Antimony	7440-36-0	3.88	U	3.88	0.485	1
06935	Arsenic	7440-38-2	3.52	J	3.88	0.320	1
06946	Barium	7440-39-3	98.6		0.969	0.0320	1
06947	Beryllium	7440-41-7	0.560	J	0.969	0.0649	1
07914	Boron	7440-42-8	6.80	J	9.69	0.804	1
06949	Cadmium	7440-43-9	0.582	J	0.969	0.0320	1
01650	Calcium	7440-70-2	3,000		19.4	3.90	1
06951	Chromium	7440-47-3	16.6		2.91	0.0853	1
06952	Cobalt	7440-48-4	4.84		0.969	0.0872	1
06953	Copper	7440-50-8	9.01		1.94	0.174	1
01654	Iron	7439-89-6	18,700		38.8	3.68	1
06955	Lead	7439-92-1	12.5		2.91	0.456	1
01656	Lithium	7439-93-2	20.9		3.9	0.53	1
01657	Magnesium	7439-95-4	3,530		9.69	1.68	1
06958	Manganese	7439-96-5	310		0.969	0.0804	1
06960	Molybdenum	7439-98-7	0.355	J	1.94	0.165	1
06961	Nickel	7440-02-0	10.8		1.94	0.107	1
10145	Phosphorus	7723-14-0	571		9.69	0.494	1
01662	Potassium	7440-09-7	3,720		96.9	13.1	1
01667	Sodium	7440-23-5	84.6	J	96.9	16.2	1
06969	Tin	7440-31-5	2.55	J	9.69	0.213	1
06970	Titanium	7440-32-6	909		0.969	0.165	1
06971	Vanadium	7440-62-2	29.8		0.969	0.107	1
06972	Zinc	7440-66-6	55.8		3.88	0.194	1
10146	Zirconium	7440-67-7	1.75	J	4.85	0.804	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.192	J	0.388	0.0969	2
06142	Silver	7440-22-4	0.0873	J	0.194	0.0194	2
06144	Strontium	7440-24-6	34.5		0.388	0.0330	2
06145	Thallium	7440-28-0	0.331		0.194	0.0291	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0131	J	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.98		0.0100	0.0100	1
	The pH was measured in water at 22.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.79		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.130	JB	1.00	0.0387	1
11031	12378-PeCDD	40321-76-4	0.526	JB	5.00	0.0579	1
11031	123478-HxCDD	39227-28-6	0.611	JB	5.00	0.0483	1
11031	123678-HxCDD	57653-85-7	1.82	JB	5.00	0.0585	1
11031	123789-HxCDD	19408-74-3	1.59	JB	5.00	0.0602	1
11031	1234678-HpCDD	35822-46-9	44.4	B	5.00	0.101	1
11031	OCDD	3268-87-9	1,010	B	10.0	0.0636	1
11031	2378-TCDF	51207-31-9	0.185	JB	1.00	0.0522	1
11031	12378-PeCDF	57117-41-6	0.440	JB	5.00	0.0321	1
11031	23478-PeCDF	57117-31-4	0.389	JBQ	5.00	0.0322	1
11031	123478-HxCDF	70648-26-9	0.324	JB	5.00	0.0341	1
11031	123678-HxCDF	57117-44-9	0.258	JB	5.00	0.0311	1
11031	123789-HxCDF	72918-21-9	0.291	JB	5.00	0.0344	1
11031	234678-HxCDF	60851-34-5	0.283	JB	5.00	0.0267	1
11031	1234678-HpCDF	67562-39-4	2.87	JB	5.00	0.0184	1
11031	1234789-HpCDF	55673-89-7	0.262	JBQ	5.00	0.0320	1
11031	OCDF	39001-02-0	8.47	JB	10.0	0.0328	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.99				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	101	32 - 141
13C12-123678-HxCDD	95	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	100	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	100	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168SLC026	06/22/2013 12:29	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13168SLC026	06/17/2013 14:00	David S Schrum	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131640017A	06/17/2013 02:41	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131640017A	06/14/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 22:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 18:48	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	131690637001	06/21/2013 18:30	John P Hook	1
01654	Iron	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	131690637001	06/21/2013 18:30	John P Hook	1
01656	Lithium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	131690637001	06/19/2013 23:19	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	131690637001B	06/21/2013 09:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131690637001A	06/21/2013 09:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131690637001A	06/21/2013 09:16	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131690637001A	06/21/2013 09:16	Choon Y Tian	2

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

Sample Description: SL-788-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7089826
LLI Group # 1396442
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/11/2013 14:50 by VC

Submitted: 06/12/2013 09:25
Reported: 06/25/2013 15:06

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL788 SDG#: PH054-09*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131690638001	06/19/2013 22:22	Katlin N Cataldi	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131690637001	06/19/2013 09:18	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131690638001	06/19/2013 11:45	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13163039402A	06/12/2013 19:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13164162402B	06/13/2013 20:03	Scott W Freisher	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13168SLC026	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	94		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	110		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	99		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	93		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	96		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	101		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	102		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	100		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	102		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	103		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	92		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	105		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		71-120		
Batch number: 13165C20A	Sample number(s): 7089822									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	99	96	75-135	3	30
Batch number: 13169A16A	Sample number(s): 7089821									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 131680004A	Sample number(s): 7089812-7089814,7089819-7089821									
25a Formaldehyde by EPA 8315A	2,000 U		2,000.	1,200	ug/kg	91		80-126		
Batch number: 131640017A	Sample number(s): 7089812-7089814,7089819-7089821,7089826									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	74	74	36-106	0	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	111		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	113		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131680022A	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	102		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	94		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 131690637001	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826									
Aluminum	40.0	U	40.0	7.71	mg/kg	107		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	105		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	97		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	99		80-120		
Cadmium	0.0330	J	1.00	0.0330	mg/kg	102		80-120		
Calcium	11.9	J	20.0	4.02	mg/kg	106		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	102		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	97		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	102		80-120		
Lithium	0.59	J	4.0	0.55	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	101		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	104		80-120		
Phosphorus	1.07	J	10.0	0.510	mg/kg	103		80-120		
Potassium	100 U		100.	13.5	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.45	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	103		80-120		
Batch number: 131690637001A	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826									
Silver	0.200	U	0.200	0.0200	mg/kg	110		80-120		
Strontium	0.0981	J	0.400	0.0340	mg/kg	109		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	106		80-120		
Batch number: 131690637001B	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826									
Selenium	0.400	U	0.400	0.100	mg/kg	111		80-120		
Batch number: 131690638001	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	92		85-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13169243201A	Sample number(s): 7089812,7089815-7089821									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	109		80-120		
Batch number: 13163039402A	Sample number(s): 7089812,7089818-7089821,7089823-7089826									
15a pH by 9045D						100		95-105		
Batch number: 13164162402B	Sample number(s): 7089812-7089821,7089823-7089826									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13170001	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826									
2378-TCDD	0.0347	J	1.00	0.0287	ng/kg	95		67-158		
12378-PeCDD	0.144	J	5.00	0.0358	ng/kg	96		70-142		
123478-HxCDD	0.0858	J	5.00	0.0248	ng/kg	101		70-164		
123678-HxCDD	0.0555	J	5.00	0.0279	ng/kg	97		76-134		
123789-HxCDD	0.138	J	5.00	0.0267	ng/kg	96		64-162		
1234678-HpCDD	0.148	J	5.00	0.0231	ng/kg	96		70-140		
OCDD	0.396	J	10.0	0.0317	ng/kg	96		78-144		
2378-TCDF	0.0327	J	1.00	0.0280	ng/kg	94		75-158		
12378-PeCDF	0.101	J	5.00	0.0223	ng/kg	98		80-134		
23478-PeCDF	0.0778	J	5.00	0.0216	ng/kg	99		68-160		
123478-HxCDF	0.0903	J	5.00	0.0142	ng/kg	98		72-134		
123678-HxCDF	0.0923	J	5.00	0.0143	ng/kg	99		84-130		
123789-HxCDF	0.161	J	5.00	0.0168	ng/kg	95		78-130		
234678-HxCDF	0.0711	J	5.00	0.0144	ng/kg	98		70-156		
1234678-HpCDF	0.108	J	5.00	0.00990	ng/kg	95		82-122		
1234789-HpCDF	0.131	J	5.00	0.0138	ng/kg	95		78-138		
OCDF	0.215	J	10.0	0.0304	ng/kg	94		63-170		
TEQ WHO 2005 - EDLx0.0	0.0603				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13168SLC026	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826 UNSPK: 7089812								
Acenaphthene	82	82	48-127	1	30				
Acenaphthylene	99	98	49-121	1	30				
Anthracene	88	88	52-126	0	30				
Benzo(a)anthracene	88	85	32-135	4	30				
Benzo(a)pyrene	85	83	36-138	2	30				
Benzo(b)fluoranthene	111	108	26-142	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(e)pyrene	79	80	70-130	0	30				
Benzo(g,h,i)perylene	44	41	33-141	6	30				
Benzo(k)fluoranthene	98	98	47-129	0	30				
Butylbenzylphthalate	115	113	59-153	2	30				
Di-n-butylphthalate	100	101	62-154	1	30				
Chrysene	84	81	29-148	4	30				
Dibenz(a,h)anthracene	54	52	34-125	4	30				
Diethylphthalate	75*	66*	76-127	14	30				
Dimethylphthalate	90	92	62-136	2	30				
Bis(2-Ethylhexyl)phthalate	78	80	39-167	2	30				
Fluoranthene	87	85	47-135	3	30				
Fluorene	84	84	50-129	0	30				
Indeno(1,2,3-cd)pyrene	52	49	17-136	6	30				
1-Methylnaphthalene	85	83	50-131	3	30				
2-Methylnaphthalene	83	81	28-144	3	30				
Naphthalene	83	82	31-148	1	30				
N-Nitrosodimethylamine	84	81	48-113	4	30				
Di-n-octylphthalate	329*	104	52-162	46*	30				
Phenanthrene	82	81	29-142	1	30				
Pyrene	93	90	26-143	3	30				
Batch number: 13169A16A	Sample number(s): 7089821 UNSPK: P088264								
11a TPH by EPA 8015B GRO	79	86	39-118	10	30				
Batch number: 131680004A	Sample number(s): 7089812-7089814,7089819-7089821 UNSPK: 7089812								
25a Formaldehyde by EPA 8315A	84	89	66-134	5	50				
Batch number: 131640017A	Sample number(s): 7089812-7089814,7089819-7089821,7089826 UNSPK: 7089812								
PCB-1016	108	99	16-146	9	50				
PCB-1260	112	102	40-134	9	50				
Batch number: 131680022A	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826 UNSPK: 7089812								
EFH (C12-C14)	100	89	49-123	12	20				
EFH (C15-C20)	152*	156*	49-123	2	20				
EFH (C21-C30)	46*	162*	49-123	33*	20				
EFH (C30-C40)	-47 (2)	342 (2)	49-123	62*	20				
EFH (C8-C11)	87	74	49-123	16	20				
Batch number: 131690637001	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826 UNSPK: 7089812 BKG: 7089812								
Aluminum	957 (2)	1462 (2)	75-125	6	20	15,100	15,200	1	20
Antimony	44*	41*	75-125	7	20	3.96 U	4.00 U	0 (1)	20
Arsenic	96	96	75-125	0	20	3.67 J	3.63 J	1 (1)	20
Barium	94	98	75-125	3	20	95.5	96.6	1	20
Beryllium	101	102	75-125	1	20	0.568 J	0.575 J	1 (1)	20
Boron	99	99	75-125	0	20	4.82 J	5.13 J	6 (1)	20
Cadmium	95	96	75-125	1	20	0.696 J	0.666 J	4 (1)	20
Calcium	82 (2)	37 (2)	75-125	6	20	2,680	3,170	17	20
Chromium	175*	87	75-125	36*	20	22.4	19.8	12	20
Cobalt	94	96	75-125	1	20	5.64	5.38	5	20
Copper	61*	73*	75-125	18	20	0.558 J	0.788 J	34* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Iron	-1192 (2)	-534 (2)	75-125	3	20	20,700	21,200	2	20
Lead	79	81	75-125	2	20	10.8	11.4	5 (1)	20
Lithium	100	100	75-125	0	20	22.0	21.8	1	20
Magnesium	69 (2)	110 (2)	75-125	2	20	3,910	4,060	4	20
Manganese	20 (2)	64 (2)	75-125	7	20	305	300	2	20
Molybdenum	99	100	75-125	0	20	1.16 J	0.581 J	67* (1)	20
Nickel	108	94	75-125	11	20	13.6	12.0	13	20
Phosphorus	54*	60*	75-125	1	20	385	405	5	20
Potassium	75	91	75-125	4	20	3,290	3,350	2	20
Sodium	97	97	75-125	0	20	107	110	3 (1)	20
Tin	93	92	75-125	1	20	2.62 J	2.56 J	2 (1)	20
Titanium	188 (2)	217 (2)	75-125	2	20	1,050	1,060	1	20
Vanadium	101	105	75-125	2	20	33.7	33.8	0	20
Zinc	76	88	75-125	6	20	63.0	62.6	1	20
Zirconium	97	96	75-125	1	20	2.09 J	2.34 J	11 (1)	20
Batch number: 131690637001A	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826 UNSPK: 7089812 BKG: 7089812								
Silver	142*	139*	75-125	2	20	0.0586 J	0.0619 J	5 (1)	20
Strontium	270*	235*	75-125	7	20	18.6	20.1	8	20
Thallium	168*	157*	75-125	5	20	0.247	0.253	3 (1)	20
Batch number: 131690637001B	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826 UNSPK: 7089812 BKG: 7089812								
Selenium	139*	135*	75-125	3	20	0.396 U	0.137 J	200* (1)	20
Batch number: 131690638001	Sample number(s): 7089812-7089814,7089818-7089821,7089823-7089826 UNSPK: 7089812 BKG: 7089812								
3a Mercury 7471A	101	88	65-135	12	20	0.0209	0.0272	26* (1)	20
Batch number: 13169243201A	Sample number(s): 7089812,7089815-7089821 UNSPK: 7089812 BKG: 7089812								
2a Chromium VI by EPA 7199	103		75-125			0.48	2.2	128* (1)	20
Batch number: 13163039402A	Sample number(s): 7089812,7089818-7089821,7089823-7089826 BKG: 7089812								
15a pH by 9045D						6.88	6.91	0	3
Batch number: 13164162402B	Sample number(s): 7089812-7089821,7089823-7089826 BKG: 7089812								
14a Moisture Content by 160.3						2.2	2.1	8	20
14a Moisture Content by 160.3						2.2	2.1	8	20
14a Moisture Content by 160.3						2.2	2.1	8	20
Batch number: 13170001	Sample number(s): 7089812-7089814,7089819-7089821,7089823-7089826 UNSPK: 7089812								
2378-TCDD	91	92	40-135	0	20				
12378-PeCDD	96	97	40-135	0	20				
123478-HxCDD	96	94	40-135	4	20				
123678-HxCDD	95	96	40-135	1	20				
123789-HxCDD	93	93	40-135	1	20				
1234678-HpCDD	47	51	40-135	3	20				
OCDD	-442 (2)	-404 (2)	40-135	28*	20				
2378-TCDF	96	92	40-135	5	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
12378-PeCDF	95	96	40-135	0	20				
23478-PeCDF	98	99	40-135	0	20				
123478-HxCDF	98	100	40-135	0	20				
123678-HxCDF	99	99	40-135	2	20				
123789-HxCDF	95	95	40-135	1	20				
234678-HxCDF	99	97	40-135	4	20				
1234678-HpCDF	92	94	40-135	0	20				
1234789-HpCDF	95	95	40-135	2	20				
OCDF	88	89	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13168SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7089812	77	85	84
7089813	71	79	81
7089814	73	82	80
7089819	72	77	83
7089820	69	75	80
7089821	77	85	87
7089823	73	79	86
7089824	71	77	83
7089825	74	80	87
7089826	75	82	87
Blank	77	85	89
LCS	80	88	92
MS	71	79	81
MSD	73	82	80
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13165C20A

	Trifluorotoluene-F
7089822	84
Blank	86
LCS	118
LCSD	115
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396442
Reported: 06/25/13 at 03:06 PM

Surrogate Quality Control

Batch number: 13169A16A

	Trifluorotoluene-F
7089821	91
Blank	95
LCS	87
MS	85
MSD	84
Limits:	61-122

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131640017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7089812	112	114
7089813	117	117
7089814	109	120
7089819	108	109
7089820	110	111
7089821	115	119
7089826	108	110
Blank	116	113
LCS	117	118
LCSD	118	117
MS	117	117
MSD	109	120
Limits:	45-120	45-120

Analysis Name: 25a Formaldehyde by EPA 8315A
Batch number: 131680004A

	Butyraldehyde
7089812	97
7089813	87
7089814	92
7089819	77
7089820	86
7089821	71
Blank	101
LCS	97
MS	87
MSD	92
Limits:	64-126

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131680022A

	Chlorobenzene	Orthoterphenyl
7089812	93	95
7089813	100	103
7089814	89	89
7089819	92	94
7089820	93	90

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Quality Control Summary

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Reported: 06/25/13 at 03:06 PM

Surrogate Quality Control

7089821	96	98
7089823	98	102
7089824	96	100
7089825	98	102
7089826	93	98
Blank	95	99
LCS	96	101
MS	100	103
MSD	90	89
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13170001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7089812	76	71	69	73	76	84
7089813	82	80	80	83	87	91
7089814	65	66	66	70	72	68
7089819	75	73	73	78	81	87
7089820	110	114	113	119	130	118
7089821	71	81	75	83	92	90
7089823	82	79	77	81	86	94
7089824	69	78	70	81	77	73
7089825	73	77	74	81	96	86
7089826	75	77	76	83	100	87
Blank	78	80	84	87	86	84
MS	82	80	80	83	87	91
MSD	65	66	66	70	72	68
OPR	63	67	70	74	71	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7089812	82	71	69	73	78	77
7089813	93	81	83	82	93	89
7089814	79	68	67	67	75	72
7089819	85	67	64	77	83	83
7089820	135	111	106	119	126	124
7089821	112	86	83	85	105	96
7089823	99	80	80	83	87	87
7089824	103	75	71	82	81	81
7089825	98	74	76	80	98	89
7089826	109	80	77	81	101	95
Blank	91	82	80	83	86	89
MS	93	81	83	82	93	89
MSD	79	68	67	67	75	72
OPR	86	74	75	71	75	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7089812	78	77	79	64	75
7089813	88	88	92	72	81

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Quality Control Summary

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Surrogate Quality Control

7089814	73	74	76	59	67
7089819	84	78	75	64	78
7089820	124	122	121	103	119
7089821	94	101	104	64	84
7089823	88	89	98	69	85
7089824	83	89	92	66	86
7089825	87	87	110	69	81
7089826	92	94	100	68	85
Blank	88	86	88	71	81
MS	88	88	92	72	81
MSD	73	74	76	59	67
OPR	77	81	86	59	68
Limits:	28-130	23-140	17-157	24-169	24-185

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acct# 13013 Gp# 1396442 Sample# 7089812-26

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/11/2013

CarrierName: FedEx

AirbillNo: 7999 7637 8065

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130611-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-783-SA5A-SB-0.0-0.5MS	6/11/13 10:00	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X										X						X				MS/MSD
SL-783-SA5A-SB-0.0-0.5MS	6/11/13 10:00	SO	None	2 - 8 oz glass	10 day													X	X																MS/MSD
SL-1183-SA5A-SB-0.0-0.5	6/11/13 10:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X						X				
SL-1183-SA5A-SB-0.0-0.5	6/11/13 10:15	SO	None	2 - 4 oz glass	10 day													X	X																
SL-789-SA5A-SB-0.0-0.5	6/11/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X						X				
SL-789-SA5A-SB-0.0-0.5	6/11/13 09:00	SO	None	2 - 4 oz glass	10 day													X	X																
SL-789-SA5A-SB-5.0-6.0	6/11/13 09:30	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X						X				
SL-789-SA5A-SB-5.0-6.0	6/11/13 09:30	SO	None	1 - 4 oz glass	10 day															X															
SL-789-SA5A-SB-5.0-6.0	6/11/13 09:30	SO	None	2 - Encore	10 day																			X											
TB-061113	6/11/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X											
SL-785-SA5A-SB-0.0-0.5	6/11/13 14:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X									
SL-785-SA5A-SB-0.0-0.5	6/11/13 14:05	SO	None	1 - 4 oz glass	10 day													X																	
SL-786-SA5A-SB-0.0-0.5	6/11/13 13:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X									
SL-786-SA5A-SB-0.0-0.5	6/11/13 13:20	SO	None	1 - 4 oz glass	10 day													X																	
SL-787-SA5A-SB-0.0-0.5	6/11/13 12:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X									
SL-787-SA5A-SB-0.0-0.5	6/11/13 12:30	SO	None	1 - 4 oz glass	10 day													X																	
SL-788-SA5A-SB-0.0-0.5	6/11/13 14:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X									
SL-788-SA5A-SB-0.0-0.5	6/11/13 14:50	SO	None	1 - 4 oz glass	10 day													X																	

Rec'd by: Pat Gh 6/12/13

1 of 2

acct# 13013 Gp# 1396442 Sample# 7089812-26

SSFL Phase 3 Chain of Custody

CDM Smith
DateShipped: 6/11/2013
CarrierName: FedEx
AirbillNo: 799976378065

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130611-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shuyi Mupel	06/11/2013	16:00									
									Patch	6/12/13	0925

COC Rev 2

COC: 20130611-01, Page 2 of 2

2 of 2

eurofins | Lancaster Laboratories

G# 1396442

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 6/12/13

Time of Receipt: 0925

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.6	TB	WI	y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Gh 3472 **Date/Time:** 6/12/13 1037

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 28, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/13/2013
Group Number: 1396835
SDG: PH055
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
EB1-061213 Water	7091426
EB2-061213 Water	7091427
SL-778-SA5A-SB-0.0-0.5 Soil	7091428
SL-778-SA5A-SB-0.0-0.5MS Soil	7091429
SL-778-SA5A-SB-0.0-0.5MSD Soil	7091430
SL-1178-SA5A-SB-0.0-0.5 Soil	7091431
SL-778-SA5A-SB-4.0-5.0 Soil	7091432
SL-781-SA5A-SB-0.0-0.5 Soil	7091433
SL-781-SA5A-SB-2.0-3.0 Soil	7091434
SL-782-SA5A-SB-0.0-0.5 Soil	7091435
SL-782-SA5A-SB-4.5-5.5 Soil	7091436
TB-061213 Water	7091437
SL-784-SA5A-SB-0.0-0.5 Soil	7091438
SL-784-SA5A-SB-2.5-3.5 Soil	7091439
SL-826-SA5A-SB-0.0-0.5 Soil	7091440
SL-826-SA5A-SB-4.0-5.0 Soil	7091441
SL-826-SA5A-SB-9.0-10.0 Soil	7091442
SL-826-SA5A-SB-14.0-15.0 Soil	7091443

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

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.055	U	0.055	0.011	1
12971	Acenaphthylene	208-96-8	0.055	U	0.055	0.011	1
12971	Anthracene	120-12-7	0.055	U	0.055	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.055	U	0.055	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.055	U	0.055	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.055	U	0.055	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.055	U	0.055	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.014	J	0.055	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.055	U	0.055	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.055	1
12971	Di-n-butylphthalate	84-74-2	0.11	J	1.1	0.055	1
12971	Chrysene	218-01-9	0.055	U	0.055	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.055	U	0.055	0.011	1
12971	Diethylphthalate	84-66-2	0.12	J	1.1	0.055	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.055	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.11	J	1.1	0.055	1
12971	Fluoranthene	206-44-0	0.055	U	0.055	0.011	1
12971	Fluorene	86-73-7	0.055	U	0.055	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.055	U	0.055	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.055	U	0.055	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.055	U	0.055	0.011	1
12971	Naphthalene	91-20-3	0.056		0.055	0.033	1
12971	N-Nitrosodimethylamine	62-75-9	0.055	U	0.055	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.055	1
12971	Phenanthrene	85-01-8	0.055	U	0.055	0.033	1
12971	Pyrene	129-00-0	0.055	U	0.055	0.011	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is < the LOQ, the data is reported.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
HPLC Organics	**SW-846 8315A**		**ug/l**		**ug/l**	**ug/l**	
04144	19b Formaldehyde 8315A	50-00-0	50	U	50	30	1
Perchlorate	**SW-846 6850 1/2007**		**ug/l**		**ug/l**	**ug/l**	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0085	U	0.0085	0.0017	1
10589	Alpha BHC	319-84-6	0.0085	U	0.0085	0.0025	1
10589	Beta BHC	319-85-7	0.0085	U	0.0085	0.0029	1

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Gamma BHC - Lindane	58-89-9	0.0085	U	0.0085	0.0017	1
10589	Chlordane	57-74-9	0.42	U	0.42	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0042	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0042	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0044	1
10589	Delta BHC	319-86-8	0.0085	U	0.0085	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0045	1
10589	Endosulfan I	959-98-8	0.0085	U	0.0085	0.0036	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0049	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0069	1
10589	Endrin Aldehyde	7421-93-4	0.085	U	0.085	0.017	1
10589	Endrin Ketone	53494-70-5	0.017	U	0.017	0.0042	1
10589	Heptachlor	76-44-8	0.0085	U	0.0085	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0085	U	0.0085	0.0019	1
10589	Methoxychlor	72-43-5	0.085	U	0.085	0.025	1
10589	Mirex	2385-85-5	0.21	U	0.21	0.072	1
10589	Toxaphene	8001-35-2	2.5	U	2.5	0.85	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.42	U	0.42	0.085	1
10591	Aroclor 5442	12642-23-8	0.42	U	0.42	0.085	1
10591	Aroclor 5460	11126-42-4	0.42	U	0.42	0.093	1
10591	PCB-1016	12674-11-2	0.42	U	0.42	0.085	1
10591	PCB-1221	11104-28-2	0.42	U	0.42	0.085	1
10591	PCB-1232	11141-16-5	0.42	U	0.42	0.17	1
10591	PCB-1242	53469-21-9	0.42	U	0.42	0.085	1
10591	PCB-1248	12672-29-6	0.42	U	0.42	0.085	1
10591	PCB-1254	11097-69-1	0.42	U	0.42	0.085	1
10591	PCB-1260	11096-82-5	0.42	U	0.42	0.13	1
10591	PCB-1262	37324-23-5	0.42	U	0.42	0.17	1
10591	PCB-1268	11100-14-4	0.42	U	0.42	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C15-C20)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C21-C30)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.099	1
10365	EFH (C8-C11)	n.a.	0.099	U	0.099	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0083	1

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07049	Cadmium	7440-43-9	0.00037 J	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.8	0.010	0.010	1

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	0.229	JQ	1.96	0.223	1
10915	12378-PeCDD		40321-76-4	9.78	U	9.78	0.269	1
10915	123478-HxCDD		39227-28-6	9.78	U	9.78	0.158	1
10915	123678-HxCDD		57653-85-7	9.78	U	9.78	0.170	1
10915	123789-HxCDD		19408-74-3	9.78	U	9.78	0.163	1
10915	1234678-HpCDD		35822-46-9	0.921	JBQ	9.78	0.194	1
10915	OCDD		3268-87-9	1.47	JB	19.6	0.235	1
10915	2378-TCDF		51207-31-9	1.96	U	1.96	0.157	1
10915	12378-PeCDF		57117-41-6	0.548	JBQ	9.78	0.132	1
10915	23478-PeCDF		57117-31-4	0.287	JBQ	9.78	0.120	1
10915	123478-HxCDF		70648-26-9	0.351	JB	9.78	0.0767	1
10915	123678-HxCDF		57117-44-9	0.142	JBQ	9.78	0.0812	1
10915	123789-HxCDF		72918-21-9	0.337	JBQ	9.78	0.0841	1
10915	234678-HxCDF		60851-34-5	0.175	JBQ	9.78	0.0746	1
10915	1234678-HpCDF		67562-39-4	9.78	U	9.78	0.0798	1
10915	1234789-HpCDF		55673-89-7	0.362	JBQ	9.78	0.0906	1
10915	OCDF		39001-02-0	0.904	JB	19.6	0.206	1
Toxic Equivalents		**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.0358				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168WAC026	06/24/2013 16:07	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13168WAC026	06/17/2013 18:00	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13168C20A	06/18/2013 11:11	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13168C20A	06/18/2013 11:11	Catherine J Schwarz	1
04144	19b Formaldehyde 8315A	SW-846 8315A	1	131640020A	06/17/2013 11:39	James H Place	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131750023A	06/21/2013 01:14	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	131650014A	06/19/2013 04:29	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131650013A	06/16/2013 23:00	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131650013A	06/15/2013 07:10	JoElla L Rice	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	131650014A	06/15/2013 07:10	JoElla L Rice	1
01013	Formaldehyde Extraction	SW-846 8315A	1	131640020A	06/14/2013 08:30	Olivia Arosemena	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700006A	06/20/2013 20:01	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131700006A	06/19/2013 15:30	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175002	06/25/2013 18:48	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	13175002	06/24/2013 12:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1

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

Sample Description: EB1-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091426
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB112 SDG#: PH055-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	131640635001	06/17/2013 01:55	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	131640639001B	06/18/2013 05:25	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131640639001A	06/18/2013 05:25	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131640639001A	06/18/2013 05:25	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131640639001A	06/18/2013 05:25	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131695713005	06/20/2013 10:00	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131640635001	06/16/2013 08:56	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131640639001	06/16/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131695713005	06/19/2013 15:30	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13164621301B	06/13/2013 15:16	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13164003101A	06/13/2013 22:53	Clayton C Litchmore	1

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.13	J	1.0	0.051	1
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.13	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.98	J	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.054		0.051	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.030	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is < the LOQ, the data is reported.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
HPLC Organics	**SW-846 8315A**		ug/l		ug/l	ug/l	
04144	19b Formaldehyde 8315A	50-00-0	50	U	50	30	1
Perchlorate	**SW-846 6850 1/2007**		ug/l		ug/l	ug/l	
06386	6b Perchlorate (Method 6850)	14797-73-0	1.0	U	1.0	0.20	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0081	U	0.0081	0.0016	1
10589	Alpha BHC	319-84-6	0.0081	U	0.0081	0.0024	1
10589	Beta BHC	319-85-7	0.0081	U	0.0081	0.0028	1

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Gamma BHC - Lindane	58-89-9	0.0081	U	0.0081	0.0016	1
10589	Chlordane	57-74-9	0.41	U	0.41	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0041	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0041	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0042	1
10589	Delta BHC	319-86-8	0.0081	U	0.0081	0.0028	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0043	1
10589	Endosulfan I	959-98-8	0.0081	U	0.0081	0.0035	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0047	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0066	1
10589	Endrin Aldehyde	7421-93-4	0.081	U	0.081	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0041	1
10589	Heptachlor	76-44-8	0.0081	U	0.0081	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0081	U	0.0081	0.0019	1
10589	Methoxychlor	72-43-5	0.081	U	0.081	0.024	1
10589	Mirex	2385-85-5	0.20	U	0.20	0.069	1
10589	Toxaphene	8001-35-2	2.4	U	2.4	0.81	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.081	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.081	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.089	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.081	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.081	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.081	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.081	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.081	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C15-C20)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C21-C30)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.099	1
10365	EFH (C8-C11)	n.a.	0.099	U	0.099	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0743	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0035	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0083	1

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07049	Cadmium	7440-43-9	0.00045 J	0.0100	0.00036	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0640	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0011	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.00066	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0021	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0333	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0051	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0060	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0606	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0029	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0011	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0052	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.145	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0022	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0013	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0092	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.00062 J	0.0010	0.00010	1
06044	Strontium	7440-24-6	0.00053 J	0.0020	0.00022	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.8	0.010	0.010	1

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.95	U	1.95	0.222	1
10915	12378-PeCDD	40321-76-4	9.76	U	9.76	0.268	1
10915	123478-HxCDD	39227-28-6	9.76	U	9.76	0.166	1
10915	123678-HxCDD	57653-85-7	0.182	JBQ	9.76	0.178	1
10915	123789-HxCDD	19408-74-3	9.76	U	9.76	0.167	1
10915	1234678-HpCDD	35822-46-9	0.479	JBQ	9.76	0.184	1
10915	OCDD	3268-87-9	1.27	JBQ	19.5	0.241	1
10915	2378-TCDF	51207-31-9	1.95	U	1.95	0.162	1
10915	12378-PeCDF	57117-41-6	0.425	JBQ	9.76	0.141	1
10915	23478-PeCDF	57117-31-4	0.201	JBQ	9.76	0.130	1
10915	123478-HxCDF	70648-26-9	0.265	JBQ	9.76	0.0773	1
10915	123678-HxCDF	57117-44-9	0.0943	JBQ	9.76	0.0780	1
10915	123789-HxCDF	72918-21-9	0.319	JB	9.76	0.0787	1
10915	234678-HxCDF	60851-34-5	0.198	JBQ	9.76	0.0760	1
10915	1234678-HpCDF	67562-39-4	0.286	JBQ	9.76	0.0611	1
10915	1234789-HpCDF	55673-89-7	0.439	JBQ	9.76	0.0718	1
10915	OCDF	39001-02-0	1.11	JBQ	19.5	0.267	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0319				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13168WAC026	06/24/2013 16:35	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13168WAC026	06/17/2013 18:00	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13168C20A	06/18/2013 11:33	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13168C20A	06/18/2013 11:33	Catherine J Schwarz	1
04144	19b Formaldehyde 8315A	SW-846 8315A	1	131640020A	06/17/2013 11:48	James H Place	1
06386	6b Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131750023A	06/21/2013 01:27	Richard A Shober	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	131650014A	06/19/2013 04:41	Lisa A Reinert	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	131650013A	06/16/2013 23:18	Monica M Souders	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	131650013A	06/15/2013 07:10	JoElla L Rice	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	131650014A	06/15/2013 07:10	JoElla L Rice	1
01013	Formaldehyde Extraction	SW-846 8315A	1	131640020A	06/14/2013 08:30	Olivia Arosemena	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700006A	06/20/2013 20:23	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131700006A	06/19/2013 15:30	Seth A Farrier	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175002	06/25/2013 19:45	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	13175002	06/24/2013 12:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1

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

Sample Description: EB2-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091427
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 15:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB212 SDG#: PH055-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10143	Phosphorus	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	131640635001	06/17/2013 01:59	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	131640639001B	06/18/2013 05:27	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131640639001A	06/18/2013 05:27	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131640639001A	06/18/2013 05:27	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131640639001A	06/18/2013 05:27	Choon Y Tian	1
00259	3b Mercury 7470A	SW-846 7470A	1	131695713005	06/20/2013 10:05	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131640635001	06/16/2013 08:56	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131640639001	06/16/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131695713005	06/19/2013 15:30	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13164621301B	06/13/2013 15:29	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13164003101A	06/13/2013 22:57	Clayton C Litchmore	1

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

Sample Description: SL-778-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091428
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 08:35

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77805 SDG#: PH055-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.1	U	5.1	2.2	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131680025A	06/20/2013 23:07	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131680025A	06/18/2013 07:05	Maria Davenport	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

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

Sample Description: SL-778-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091429
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 08:35

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77805 SDG#: PH055-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	94	5.1	2.2	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.6	0.10	0.10	1

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131680025A	06/20/2013 23:19	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131680025A	06/18/2013 07:05	Maria Davenport	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

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

Sample Description: SL-778-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091430
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 08:35

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77805 SDG#: PH055-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	94	5.1	2.2	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.6	0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.6	0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131680025A	06/20/2013 23:32	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131680025A	06/18/2013 07:05	Maria Davenport	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

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

Sample Description: SL-1178-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091431
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 08:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11780 SDG#: PH055-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.2	U	5.2	2.2	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

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

General Sample Comments

State of California Lab Certification No. 2501

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131680025A	06/20/2013 23:45	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131680025A	06/18/2013 07:05	Maria Davenport	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: SL-778-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091432
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

77840 SDG#: PH055-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	
06557	6a Perchlorate (Method 6850)	14797-73-0	5.3	U	5.3	2.2	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	5.2		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate (Method 6850)	SW-846 6850 1/2007	1	131680025A	06/20/2013 23:58	Richard A Shober	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	131680025A	06/18/2013 07:05	Maria Davenport	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	13	J	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	3.9	J	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	8.7	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,900		41.6	8.02	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.520	1
06935	Arsenic	7440-38-2	4.71		4.16	0.343	1
06946	Barium	7440-39-3	137		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.774	J	1.04	0.0697	1
07914	Boron	7440-42-8	8.48	J	10.4	0.863	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0343	1
01650	Calcium	7440-70-2	2,550		20.8	4.18	1
06951	Chromium	7440-47-3	24.9		3.12	0.0915	1
06952	Cobalt	7440-48-4	5.59		1.04	0.0936	1
06953	Copper	7440-50-8	13.9		2.08	0.187	1
01654	Iron	7439-89-6	20,100		41.6	3.95	1
06955	Lead	7439-92-1	5.34		3.12	0.489	1
01656	Lithium	7439-93-2	24.4		4.2	0.57	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,450		10.4	1.80	1
06958	Manganese	7439-96-5	441		1.04	0.0863	1
06960	Molybdenum	7439-98-7	0.544	J	2.08	0.177	1
06961	Nickel	7440-02-0	15.8		2.08	0.114	1
10145	Phosphorus	7723-14-0	412		10.4	0.530	1
01662	Potassium	7440-09-7	3,880		104	14.0	1
01667	Sodium	7440-23-5	82.9	J	104	17.4	1
06969	Tin	7440-31-5	2.88	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,390		1.04	0.177	1
06971	Vanadium	7440-62-2	43.6		1.04	0.114	1
06972	Zinc	7440-66-6	64.9		4.16	0.208	1
10146	Zirconium	7440-67-7	3.62	J	5.20	0.863	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.202	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0429	J	0.208	0.0208	2
06144	Strontium	7440-24-6	27.6		0.416	0.0354	2
06145	Thallium	7440-28-0	0.305		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.37		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0451 JBQ	1.04	0.0393	1
11031	12378-PeCDD	40321-76-4	0.172 JBQ	5.20	0.0444	1
11031	123478-HxCDD	39227-28-6	0.0759 JBQ	5.20	0.0316	1
11031	123678-HxCDD	57653-85-7	0.233 JB	5.20	0.0355	1
11031	123789-HxCDD	19408-74-3	0.251 JBQ	5.20	0.0352	1
11031	1234678-HpCDD	35822-46-9	3.55 JB	5.20	0.0625	1
11031	OCDD	3268-87-9	94.2 B	10.4	0.0487	1
11031	2378-TCDF	51207-31-9	0.0433 JBQ	1.04	0.0354	1
11031	12378-PeCDF	57117-41-6	0.191 JB	5.20	0.0232	1
11031	23478-PeCDF	57117-31-4	0.166 JBQ	5.20	0.0237	1
11031	123478-HxCDF	70648-26-9	0.0896 JBQ	5.20	0.0208	1
11031	123678-HxCDF	57117-44-9	0.104 JB	5.20	0.0183	1
11031	123789-HxCDF	72918-21-9	0.201 JB	5.20	0.0248	1
11031	234678-HxCDF	60851-34-5	0.0819 JB	5.20	0.0174	1
11031	1234678-HpCDF	67562-39-4	0.328 JBQ	5.20	0.0155	1
11031	1234789-HpCDF	55673-89-7	0.0979 JBQ	5.20	0.0283	1
11031	OCDF	39001-02-0	0.850 JB	10.4	0.0441	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.132			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 13:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 18:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 19:45	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:33	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 06:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091433
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78100 SDG#: PH055-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.56
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		40.7	7.85	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.509	1
06935	Arsenic	7440-38-2	5.52		4.07	0.336	1
06946	Barium	7440-39-3	69.8		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.581	J	1.02	0.0682	1
07914	Boron	7440-42-8	2.26	J	10.2	0.845	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0336	1
01650	Calcium	7440-70-2	2,430		20.4	4.09	1
06951	Chromium	7440-47-3	16.2		3.05	0.0896	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.89		1.02	0.0916	1
06953	Copper	7440-50-8	5.74		2.04	0.183	1
01654	Iron	7439-89-6	18,900		40.7	3.87	1
06955	Lead	7439-92-1	3.04	J	3.05	0.478	1
01656	Lithium	7439-93-2	28.8		4.1	0.56	1
01657	Magnesium	7439-95-4	4,310		10.2	1.76	1
06958	Manganese	7439-96-5	343		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.204	J	2.04	0.173	1
06961	Nickel	7440-02-0	9.55		2.04	0.112	1
10145	Phosphorus	7723-14-0	375		10.2	0.519	1
01662	Potassium	7440-09-7	2,220		102	13.7	1
01667	Sodium	7440-23-5	108		102	17.0	1
06969	Tin	7440-31-5	3.10	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,350		1.02	0.173	1
06971	Vanadium	7440-62-2	33.5		1.02	0.112	1
06972	Zinc	7440-66-6	57.2		4.07	0.204	1
10146	Zirconium	7440-67-7	2.71	J	5.09	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.121	J	0.407	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0204	2
06144	Strontium	7440-24-6	21.0		0.407	0.0346	2
06145	Thallium	7440-28-0	0.322		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.85		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0266 JBQ	1.00	0.0255	1
11031	12378-PeCDD	40321-76-4	0.0399 JBQ	5.00	0.0325	1
11031	123478-HxCDD	39227-28-6	5.00 U	5.00	0.0213	1
11031	123678-HxCDD	57653-85-7	0.0585 JB	5.00	0.0227	1
11031	123789-HxCDD	19408-74-3	0.106 JBQ	5.00	0.0222	1
11031	1234678-HpCDD	35822-46-9	0.185 JBQ	5.00	0.0232	1
11031	OCDD	3268-87-9	1.56 JB	10.0	0.0267	1
11031	2378-TCDF	51207-31-9	1.00 U	1.00	0.0260	1
11031	12378-PeCDF	57117-41-6	0.0765 JB	5.00	0.0182	1
11031	23478-PeCDF	57117-31-4	0.0921 JBQ	5.00	0.0182	1
11031	123478-HxCDF	70648-26-9	0.0932 JBQ	5.00	0.0150	1
11031	123678-HxCDF	57117-44-9	0.0700 JBQ	5.00	0.0134	1
11031	123789-HxCDF	72918-21-9	0.0622 JBQ	5.00	0.0139	1
11031	234678-HxCDF	60851-34-5	0.0467 JBQ	5.00	0.0119	1
11031	1234678-HpCDF	67562-39-4	0.0642 JBQ	5.00	0.0126	1
11031	1234789-HpCDF	55673-89-7	0.0699 JB	5.00	0.0229	1
11031	OCDF	39001-02-0	0.132 JB	10.0	0.0420	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00935			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 14:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/18/2013 23:26	Laura M Krieger	24.56
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013 14:28	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013 14:28	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 18:36	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 20:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:37	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 11:58	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 11:58	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 11:58	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-781-SA5A-SB-2.0-3.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091434
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 09:50

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78123 SDG#: PH055-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 11:58	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 06:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,900		41.4	7.98	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.518	1
06935	Arsenic	7440-38-2	5.06		4.14	0.342	1
06946	Barium	7440-39-3	101		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.834	J	1.04	0.0694	1
07914	Boron	7440-42-8	3.66	J	10.4	0.859	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0342	1
01650	Calcium	7440-70-2	2,260		20.7	4.16	1
06951	Chromium	7440-47-3	26.0		3.11	0.0911	1
06952	Cobalt	7440-48-4	5.50		1.04	0.0932	1
06953	Copper	7440-50-8	7.40		2.07	0.186	1
01654	Iron	7439-89-6	19,600		41.4	3.93	1
06955	Lead	7439-92-1	5.65		3.11	0.487	1
01656	Lithium	7439-93-2	25.5		4.1	0.57	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,220		10.4	1.79	1
06958	Manganese	7439-96-5	318		1.04	0.0859	1
06960	Molybdenum	7439-98-7	0.683	J	2.07	0.176	1
06961	Nickel	7440-02-0	14.0		2.07	0.114	1
10145	Phosphorus	7723-14-0	225		10.4	0.528	1
01662	Potassium	7440-09-7	1,810		104	14.0	1
01667	Sodium	7440-23-5	158		104	17.3	1
06969	Tin	7440-31-5	2.84	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,250		1.04	0.176	1
06971	Vanadium	7440-62-2	41.7		1.04	0.114	1
06972	Zinc	7440-66-6	50.1		4.14	0.207	1
10146	Zirconium	7440-67-7	4.28	J	5.18	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.104	2
06142	Silver	7440-22-4	0.0472	J	0.207	0.0207	2
06144	Strontium	7440-24-6	22.8		0.414	0.0352	2
06145	Thallium	7440-28-0	0.259		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.62		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0254	1
11031	12378-PeCDD	40321-76-4	0.0562 JBQ	5.08	0.0367	1
11031	123478-HxCDD	39227-28-6	0.0383 JBQ	5.08	0.0366	1
11031	123678-HxCDD	57653-85-7	0.144 JB	5.08	0.0377	1
11031	123789-HxCDD	19408-74-3	0.148 JBQ	5.08	0.0371	1
11031	1234678-HpCDD	35822-46-9	0.888 JBQ	5.08	0.0378	1
11031	OCDD	3268-87-9	10.6 B	10.2	0.0246	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0271	1
11031	12378-PeCDF	57117-41-6	0.0831 JBQ	5.08	0.0180	1
11031	23478-PeCDF	57117-31-4	0.0461 JBQ	5.08	0.0182	1
11031	123478-HxCDF	70648-26-9	0.0583 JBQ	5.08	0.0157	1
11031	123678-HxCDF	57117-44-9	5.08 U	5.08	0.0141	1
11031	123789-HxCDF	72918-21-9	0.127 JBQ	5.08	0.0173	1
11031	234678-HxCDF	60851-34-5	0.0533 JB	5.08	0.0144	1
11031	1234678-HpCDF	67562-39-4	0.155 JBQ	5.08	0.0183	1
11031	1234789-HpCDF	55673-89-7	0.105 JB	5.08	0.0380	1
11031	OCDF	39001-02-0	0.378 JB	10.2	0.0351	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0242			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 15:08	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 18:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 21:38	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:41	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:01	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:01	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:01	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:01	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091435
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:30

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78200 SDG#: PH055-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.05
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		42.5	8.18	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.531	1
06935	Arsenic	7440-38-2	5.20		4.25	0.350	1
06946	Barium	7440-39-3	53.2		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.621	J	1.06	0.0711	1
07914	Boron	7440-42-8	2.57	J	10.6	0.881	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0350	1
01650	Calcium	7440-70-2	1,610		21.2	4.27	1
06951	Chromium	7440-47-3	17.0		3.18	0.0934	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	2.75	1.06	0.0955	1
06953	Copper	7440-50-8	5.17	2.12	0.191	1
01654	Iron	7439-89-6	19,800	42.5	4.03	1
06955	Lead	7439-92-1	4.63	3.18	0.499	1
01656	Lithium	7439-93-2	18.5	4.2	0.58	1
01657	Magnesium	7439-95-4	3,700	10.6	1.84	1
06958	Manganese	7439-96-5	148	1.06	0.0881	1
06960	Molybdenum	7439-98-7	0.441 J	2.12	0.180	1
06961	Nickel	7440-02-0	7.20	2.12	0.117	1
10145	Phosphorus	7723-14-0	136	10.6	0.541	1
01662	Potassium	7440-09-7	1,660	106	14.3	1
01667	Sodium	7440-23-5	241	106	17.7	1
06969	Tin	7440-31-5	3.07 J	10.6	0.234	1
06970	Titanium	7440-32-6	1,100	1.06	0.180	1
06971	Vanadium	7440-62-2	36.3	1.06	0.117	1
06972	Zinc	7440-66-6	40.6	4.25	0.212	1
10146	Zirconium	7440-67-7	2.97 J	5.31	0.881	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.425 U	0.425	0.106	2
06142	Silver	7440-22-4	0.0482 J	0.212	0.0212	2
06144	Strontium	7440-24-6	17.8	0.425	0.0361	2
06145	Thallium	7440-28-0	0.199 J	0.212	0.0318	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112 J	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.63	0.0100	0.0100	1
	The pH was measured in water at 21.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0297	1
11031	12378-PeCDD	40321-76-4	0.0622	JBQ	5.27	0.0370	1
11031	123478-HxCDD	39227-28-6	0.105	JB	5.27	0.0308	1
11031	123678-HxCDD	57653-85-7	0.198	JBQ	5.27	0.0343	1
11031	123789-HxCDD	19408-74-3	0.155	JBQ	5.27	0.0347	1
11031	1234678-HpCDD	35822-46-9	3.34	JB	5.27	0.0483	1
11031	OCDD	3268-87-9	54.8	B	10.5	0.0355	1
11031	2378-TCDF	51207-31-9	0.0313	JBQ	1.05	0.0279	1
11031	12378-PeCDF	57117-41-6	0.145	JB	5.27	0.0195	1
11031	23478-PeCDF	57117-31-4	0.0614	JBQ	5.27	0.0200	1
11031	123478-HxCDF	70648-26-9	0.0705	JBQ	5.27	0.0160	1
11031	123678-HxCDF	57117-44-9	0.0345	JBQ	5.27	0.0142	1
11031	123789-HxCDF	72918-21-9	0.0676	JBQ	5.27	0.0173	1
11031	234678-HxCDF	60851-34-5	0.0745	JBQ	5.27	0.0154	1
11031	1234678-HpCDF	67562-39-4	0.333	JB	5.27	0.0158	1
11031	1234789-HpCDF	55673-89-7	0.0419	JBQ	5.27	0.0327	1
11031	OCDF	39001-02-0	0.819	JBQ	10.5	0.0359	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0680				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	90	25 - 164
13C12-12378-PeCDD	96	25 - 181
13C12-123478-HxCDD	102	32 - 141
13C12-123678-HxCDD	103	28 - 130
13C12-123789-HxCDD	102	28 - 130
13C12-1234678-HpCDD	107	23 - 140
13C12-OCDD	109	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	103	24 - 185
13C12-23478-PeCDF	92	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	98	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	97	29 - 147
13C12-1234678-HpCDF	137	28 - 143
13C12-1234789-HpCDF	86	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 15:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013 00:05	Laura M Krieger	25.05
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013 14:29	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013 14:29	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 19:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 22:35	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:44	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:03	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:03	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:03	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-782-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091436
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 10:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78245 SDG#: PH055-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:03	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-061213 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7091437
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 08:00

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB612 SDG#: PH055-10TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13168C20A	06/18/2013 11:55	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13168C20A	06/18/2013 11:55	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.87	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	68		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.46	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	85		19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,400		40.9	7.88	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.511	1
06935	Arsenic	7440-38-2	5.65		4.09	0.337	1
06946	Barium	7440-39-3	98.2		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.768	J	1.02	0.0685	1
07914	Boron	7440-42-8	3.25	J	10.2	0.849	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0337	1
01650	Calcium	7440-70-2	2,180		20.4	4.11	1
06951	Chromium	7440-47-3	19.3		3.07	0.0900	1
06952	Cobalt	7440-48-4	6.24		1.02	0.0920	1
06953	Copper	7440-50-8	8.23		2.04	0.184	1
01654	Iron	7439-89-6	19,300		40.9	3.88	1
06955	Lead	7439-92-1	5.80		3.07	0.480	1
01656	Lithium	7439-93-2	20.7		4.1	0.56	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,720		10.2	1.77	1
06958	Manganese	7439-96-5	279		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.448	J	2.04	0.174	1
06961	Nickel	7440-02-0	11.1		2.04	0.112	1
10145	Phosphorus	7723-14-0	224		10.2	0.521	1
01662	Potassium	7440-09-7	2,260		102	13.8	1
01667	Sodium	7440-23-5	129		102	17.1	1
06969	Tin	7440-31-5	2.86	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,120		1.02	0.174	1
06971	Vanadium	7440-62-2	40.0		1.02	0.112	1
06972	Zinc	7440-66-6	44.6		4.09	0.204	1
10146	Zirconium	7440-67-7	3.61	J	5.11	0.849	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.173	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0273	J	0.204	0.0204	2
06144	Strontium	7440-24-6	25.8		0.409	0.0348	2
06145	Thallium	7440-28-0	0.298		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.14		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0288	1
11031	12378-PeCDD	40321-76-4	0.0787	JBQ	5.13	0.0358	1
11031	123478-HxCDD	39227-28-6	0.117	JBQ	5.13	0.0376	1
11031	123678-HxCDD	57653-85-7	0.222	JBQ	5.13	0.0398	1
11031	123789-HxCDD	19408-74-3	0.210	JBQ	5.13	0.0389	1
11031	1234678-HpCDD	35822-46-9	4.89	JB	5.13	0.0482	1
11031	OCDD	3268-87-9	95.3	B	10.3	0.0325	1
11031	2378-TCDF	51207-31-9	0.0283	JBQ	1.03	0.0269	1
11031	12378-PeCDF	57117-41-6	0.0936	JB	5.13	0.0184	1
11031	23478-PeCDF	57117-31-4	0.0727	JBQ	5.13	0.0193	1
11031	123478-HxCDF	70648-26-9	0.0726	JB	5.13	0.0158	1
11031	123678-HxCDF	57117-44-9	0.0444	JBQ	5.13	0.0149	1
11031	123789-HxCDF	72918-21-9	0.0544	JB	5.13	0.0163	1
11031	234678-HxCDF	60851-34-5	0.0627	JBQ	5.13	0.0133	1
11031	1234678-HpCDF	67562-39-4	0.543	JBQ	5.13	0.0133	1
11031	1234789-HpCDF	55673-89-7	0.0894	JB	5.13	0.0231	1
11031	OCDF	39001-02-0	1.41	JB	10.3	0.0288	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0944				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	108	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 16:11	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 19:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/21/2013 23:32	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 03:48	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091438
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:45

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78400 SDG#: PH055-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.91	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.04
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	8.1	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,500		40.5	7.80	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.506	1
06935	Arsenic	7440-38-2	4.76		4.05	0.334	1
06946	Barium	7440-39-3	66.3		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.563	J	1.01	0.0678	1
07914	Boron	7440-42-8	2.86	J	10.1	0.839	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0334	1
01650	Calcium	7440-70-2	1,900		20.2	4.07	1
06951	Chromium	7440-47-3	16.0		3.03	0.0890	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	
06952	Cobalt	7440-48-4	3.57		1.01	0.0910	1
06953	Copper	7440-50-8	5.80		2.02	0.182	1
01654	Iron	7439-89-6	16,100		40.5	3.84	1
06955	Lead	7439-92-1	4.34		3.03	0.475	1
01656	Lithium	7439-93-2	16.8		4.0	0.56	1
01657	Magnesium	7439-95-4	3,200		10.1	1.75	1
06958	Manganese	7439-96-5	182		1.01	0.0839	1
06960	Molybdenum	7439-98-7	0.330	J	2.02	0.172	1
06961	Nickel	7440-02-0	7.51		2.02	0.111	1
10145	Phosphorus	7723-14-0	146		10.1	0.516	1
01662	Potassium	7440-09-7	1,810		101	13.7	1
01667	Sodium	7440-23-5	157		101	16.9	1
06969	Tin	7440-31-5	2.79	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,080		1.01	0.172	1
06971	Vanadium	7440-62-2	32.4		1.01	0.111	1
06972	Zinc	7440-66-6	35.4		4.05	0.202	1
10146	Zirconium	7440-67-7	3.42	J	5.06	0.839	1
	SW-846 6020A		mg/kg		mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.119	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0233	J	0.202	0.0202	2
06144	Strontium	7440-24-6	19.8		0.405	0.0344	2
06145	Thallium	7440-28-0	0.229		0.202	0.0303	2
	SW-846 7471B		mg/kg		mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		Std. Units		Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	7.15		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0369	1
11031	12378-PeCDD	40321-76-4	0.119	JB	5.15	0.0467	1
11031	123478-HxCDD	39227-28-6	0.118	JBQ	5.15	0.0314	1
11031	123678-HxCDD	57653-85-7	0.265	JB	5.15	0.0358	1
11031	123789-HxCDD	19408-74-3	0.215	JB	5.15	0.0349	1
11031	1234678-HpCDD	35822-46-9	4.43	JB	5.15	0.0544	1
11031	OCDD	3268-87-9	66.9	B	10.3	0.0364	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0358	1
11031	12378-PeCDF	57117-41-6	0.138	JBQ	5.15	0.0221	1
11031	23478-PeCDF	57117-31-4	0.0843	JB	5.15	0.0241	1
11031	123478-HxCDF	70648-26-9	5.15	U	5.15	0.0199	1
11031	123678-HxCDF	57117-44-9	0.0874	JB	5.15	0.0170	1
11031	123789-HxCDF	72918-21-9	0.123	JBQ	5.15	0.0216	1
11031	234678-HxCDF	60851-34-5	0.0867	JBQ	5.15	0.0161	1
11031	1234678-HpCDF	67562-39-4	0.494	JB	5.15	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0953	JBQ	5.15	0.0255	1
11031	OCDF	39001-02-0	1.46	JB	10.3	0.0405	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.271				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	114	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/22/2013 16:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013 00:43	Laura M Krieger	24.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013 14:30	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013 14:31	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 19:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/22/2013 00:28	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 04:00	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:13	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-784-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091439
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 14:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78423 SDG#: PH055-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:13	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	3.4		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.2	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	140		18	6.1	1
12969	Fluoranthene	206-44-0	0.99	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	51		18	6.1	1
12969	Phenanthrene	85-01-8	0.73	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.90	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	3.5	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	5.8	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		40.6	7.82	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.507	1
06935	Arsenic	7440-38-2	3.92	J	4.06	0.335	1
06946	Barium	7440-39-3	114		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.655	J	1.01	0.0680	1
07914	Boron	7440-42-8	4.18	J	10.1	0.842	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0335	1
01650	Calcium	7440-70-2	2,090		20.3	4.08	1
06951	Chromium	7440-47-3	21.7		3.04	0.0893	1
06952	Cobalt	7440-48-4	5.87		1.01	0.0913	1
06953	Copper	7440-50-8	10.9		2.03	0.183	1
01654	Iron	7439-89-6	19,100		40.6	3.85	1
06955	Lead	7439-92-1	4.64		3.04	0.477	1
01656	Lithium	7439-93-2	21.7		4.1	0.56	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,330		10.1	1.75	1
06958	Manganese	7439-96-5	313		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.470	J	2.03	0.172	1
06961	Nickel	7440-02-0	13.0		2.03	0.112	1
10145	Phosphorus	7723-14-0	410		10.1	0.517	1
01662	Potassium	7440-09-7	3,920		101	13.7	1
01667	Sodium	7440-23-5	75.2	J	101	16.9	1
06969	Tin	7440-31-5	2.71	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,280		1.01	0.172	1
06971	Vanadium	7440-62-2	38.0		1.01	0.112	1
06972	Zinc	7440-66-6	63.1		4.06	0.203	1
10146	Zirconium	7440-67-7	3.71	J	5.07	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.150	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0334	J	0.203	0.0203	2
06144	Strontium	7440-24-6	28.7		0.406	0.0345	2
06145	Thallium	7440-28-0	0.357		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	U	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.50		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.990	U	0.990	0.0343	1
11031	12378-PeCDD	40321-76-4	0.406	JBQ	4.95	0.0483	1
11031	123478-HxCDD	39227-28-6	0.373	JBQ	4.95	0.0498	1
11031	123678-HxCDD	57653-85-7	1.02	JB	4.95	0.0531	1
11031	123789-HxCDD	19408-74-3	1.12	JB	4.95	0.0503	1
11031	1234678-HpCDD	35822-46-9	21.9	B	4.95	0.0628	1
11031	OCDD	3268-87-9	527	B	9.90	0.0374	1
11031	2378-TCDF	51207-31-9	0.108	JBQ	0.990	0.0444	1
11031	12378-PeCDF	57117-41-6	0.464	JB	4.95	0.0267	1
11031	23478-PeCDF	57117-31-4	0.282	JBQ	4.95	0.0274	1
11031	123478-HxCDF	70648-26-9	0.223	JBQ	4.95	0.0260	1
11031	123678-HxCDF	57117-44-9	0.231	JBQ	4.95	0.0248	1
11031	123789-HxCDF	72918-21-9	0.531	JBQ	4.95	0.0259	1
11031	234678-HxCDF	60851-34-5	0.199	JB	4.95	0.0227	1
11031	1234678-HpCDF	67562-39-4	2.15	JB	4.95	0.0164	1
11031	1234789-HpCDF	55673-89-7	0.153	JBQ	4.95	0.0265	1
11031	OCDF	39001-02-0	6.51	JB	9.90	0.0297	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.648				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	79	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/23/2013 11:09	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 20:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/22/2013 01:25	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 04:04	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:15	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:15	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:15	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:15	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:09	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091440
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:15

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82600 SDG#: PH055-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401A	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	7.0	J	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.1	J	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	2.1		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	8.9	J	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.18
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	3.0	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	7.2	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		43.2	8.32	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.540	1
06935	Arsenic	7440-38-2	4.92		4.32	0.356	1
06946	Barium	7440-39-3	127		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.778	J	1.08	0.0723	1
07914	Boron	7440-42-8	3.68	J	10.8	0.896	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0356	1
01650	Calcium	7440-70-2	2,610		21.6	4.34	1
06951	Chromium	7440-47-3	23.4		3.24	0.0950	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	10.9		1.08	0.0972	1
06953	Copper	7440-50-8	7.93		2.16	0.194	1
01654	Iron	7439-89-6	21,700		43.2	4.10	1
06955	Lead	7439-92-1	5.21		3.24	0.507	1
01656	Lithium	7439-93-2	28.1		4.3	0.59	1
01657	Magnesium	7439-95-4	4,680		10.8	1.87	1
06958	Manganese	7439-96-5	844		1.08	0.0896	1
06960	Molybdenum	7439-98-7	0.737	J	2.16	0.184	1
06961	Nickel	7440-02-0	16.5		2.16	0.119	1
10145	Phosphorus	7723-14-0	242		10.8	0.551	1
01662	Potassium	7440-09-7	1,900		108	14.6	1
01667	Sodium	7440-23-5	101	J	108	18.0	1
06969	Tin	7440-31-5	2.95	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,310		1.08	0.184	1
06971	Vanadium	7440-62-2	45.0		1.08	0.119	1
06972	Zinc	7440-66-6	54.7		4.32	0.216	1
10146	Zirconium	7440-67-7	3.19	J	5.40	0.896	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.432	U	0.432	0.108	2
06142	Silver	7440-22-4	0.0597	J	0.216	0.0216	2
06144	Strontium	7440-24-6	27.0		0.432	0.0367	2
06145	Thallium	7440-28-0	0.349		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.56		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0875 JBQ	1.04	0.0394	1
11031	12378-PeCDD	40321-76-4	0.251 JB	5.22	0.0422	1
11031	123478-HxCDD	39227-28-6	0.0876 JBQ	5.22	0.0334	1
11031	123678-HxCDD	57653-85-7	0.105 JBQ	5.22	0.0360	1
11031	123789-HxCDD	19408-74-3	0.194 JBQ	5.22	0.0347	1
11031	1234678-HpCDD	35822-46-9	0.258 JBQ	5.22	0.0299	1
11031	OCDD	3268-87-9	1.77 JB	10.4	0.0288	1
11031	2378-TCDF	51207-31-9	0.0801 JBQ	1.04	0.0297	1
11031	12378-PeCDF	57117-41-6	0.213 JBQ	5.22	0.0227	1
11031	23478-PeCDF	57117-31-4	0.166 JBQ	5.22	0.0217	1
11031	123478-HxCDF	70648-26-9	0.133 JBQ	5.22	0.0170	1
11031	123678-HxCDF	57117-44-9	0.104 JBQ	5.22	0.0136	1
11031	123789-HxCDF	72918-21-9	0.208 JBQ	5.22	0.0172	1
11031	234678-HxCDF	60851-34-5	0.120 JBQ	5.22	0.0154	1
11031	1234678-HpCDF	67562-39-4	0.119 JBQ	5.22	0.0103	1
11031	1234789-HpCDF	55673-89-7	0.229 JB	5.22	0.0204	1
11031	OCDF	39001-02-0	0.314 JBQ	10.4	0.0352	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.254			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	105	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/23/2013	11:40	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013	07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013	01:21	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013	14:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013	14:32	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013	21:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013	02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/22/2013	05:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013	12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013	04:08	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013	12:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013	12:17	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091441
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:25

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82645 SDG#: PH055-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.63	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.61
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	9.1		5.3	2.1	1
12952	EFH (C30-C40)	n.a.	13		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,100		41.3	7.96	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.516	1
06935	Arsenic	7440-38-2	3.55	J	4.13	0.341	1
06946	Barium	7440-39-3	73.5		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.464	J	1.03	0.0692	1
07914	Boron	7440-42-8	2.74	J	10.3	0.857	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0341	1
01650	Calcium	7440-70-2	2,140		20.7	4.15	1
06951	Chromium	7440-47-3	16.4		3.10	0.0909	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	2.69		1.03	0.0930	1
06953	Copper	7440-50-8	6.65		2.07	0.186	1
01654	Iron	7439-89-6	14,800		41.3	3.92	1
06955	Lead	7439-92-1	4.19		3.10	0.485	1
01656	Lithium	7439-93-2	19.4		4.1	0.57	1
01657	Magnesium	7439-95-4	3,210		10.3	1.79	1
06958	Manganese	7439-96-5	185		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.284	J	2.07	0.176	1
06961	Nickel	7440-02-0	8.31		2.07	0.114	1
10145	Phosphorus	7723-14-0	225		10.3	0.527	1
01662	Potassium	7440-09-7	1,790		103	13.9	1
01667	Sodium	7440-23-5	91.4	J	103	17.2	1
06969	Tin	7440-31-5	2.74	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,110		1.03	0.176	1
06971	Vanadium	7440-62-2	29.6		1.03	0.114	1
06972	Zinc	7440-66-6	39.4		4.13	0.207	1
10146	Zirconium	7440-67-7	3.00	J	5.16	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.413	U	0.413	0.103	2
06142	Silver	7440-22-4	0.0341	J	0.207	0.0207	2
06144	Strontium	7440-24-6	20.4		0.413	0.0351	2
06145	Thallium	7440-28-0	0.268		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.21		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0337	1
11031	12378-PeCDD	40321-76-4	0.116	JBQ	5.30	0.0384	1
11031	123478-HxCDD	39227-28-6	0.206	JB	5.30	0.0456	1
11031	123678-HxCDD	57653-85-7	0.374	JB	5.30	0.0477	1
11031	123789-HxCDD	19408-74-3	0.331	JB	5.30	0.0462	1
11031	1234678-HpCDD	35822-46-9	6.71	B	5.30	0.0437	1
11031	OCDD	3268-87-9	121	B	10.6	0.0326	1
11031	2378-TCDF	51207-31-9	0.0483	JB	1.06	0.0391	1
11031	12378-PeCDF	57117-41-6	0.236	JBQ	5.30	0.0206	1
11031	23478-PeCDF	57117-31-4	0.148	JB	5.30	0.0226	1
11031	123478-HxCDF	70648-26-9	0.156	JBQ	5.30	0.0205	1
11031	123678-HxCDF	57117-44-9	0.115	JBQ	5.30	0.0182	1
11031	123789-HxCDF	72918-21-9	0.193	JBQ	5.30	0.0211	1
11031	234678-HxCDF	60851-34-5	0.148	JBQ	5.30	0.0172	1
11031	1234678-HpCDF	67562-39-4	0.760	JB	5.30	0.0144	1
11031	1234789-HpCDF	55673-89-7	0.165	JBQ	5.30	0.0265	1
11031	OCDF	39001-02-0	2.43	JB	10.6	0.0283	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.252				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	106	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/23/2013	12:12	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013	07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013	01:59	Laura M Krieger	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013	14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013	14:33	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013	21:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013	02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/22/2013	06:17	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013	12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013	04:12	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013	12:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013	12:20	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091442
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:40

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82691 SDG#: PH055-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:20	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.5	J	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.98
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,500		42.7	8.23	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.533	1
06935	Arsenic	7440-38-2	10.1		4.27	0.352	1
06946	Barium	7440-39-3	65.1		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.654	J	1.07	0.0715	1
07914	Boron	7440-42-8	2.73	J	10.7	0.886	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0352	1
01650	Calcium	7440-70-2	3,300		21.3	4.29	1
06951	Chromium	7440-47-3	19.7		3.20	0.0939	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	4.14		1.07	0.0960	1
06953	Copper	7440-50-8	7.33		2.13	0.192	1
01654	Iron	7439-89-6	21,800		42.7	4.05	1
06955	Lead	7439-92-1	3.44		3.20	0.501	1
01656	Lithium	7439-93-2	21.5		4.3	0.59	1
01657	Magnesium	7439-95-4	4,620		10.7	1.85	1
06958	Manganese	7439-96-5	189		1.07	0.0886	1
06960	Molybdenum	7439-98-7	0.326	J	2.13	0.181	1
06961	Nickel	7440-02-0	10.2		2.13	0.117	1
10145	Phosphorus	7723-14-0	411		10.7	0.544	1
01662	Potassium	7440-09-7	2,120		107	14.4	1
01667	Sodium	7440-23-5	211		107	17.8	1
06969	Tin	7440-31-5	3.01	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,280		1.07	0.181	1
06971	Vanadium	7440-62-2	39.8		1.07	0.117	1
06972	Zinc	7440-66-6	56.3		4.27	0.213	1
10146	Zirconium	7440-67-7	2.95	J	5.33	0.886	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.199	J	0.427	0.107	2
06142	Silver	7440-22-4	0.213	U	0.213	0.0213	2
06144	Strontium	7440-24-6	25.8		0.427	0.0363	2
06145	Thallium	7440-28-0	0.429		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0170	U	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.67		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0410 JBQ	1.07	0.0393	1
11031	12378-PeCDD	40321-76-4	0.0584 JBQ	5.34	0.0425	1
11031	123478-HxCDD	39227-28-6	0.0707 JB	5.34	0.0236	1
11031	123678-HxCDD	57653-85-7	0.0588 JB	5.34	0.0273	1
11031	123789-HxCDD	19408-74-3	5.34 U	5.34	0.0256	1
11031	1234678-HpCDD	35822-46-9	0.135 JB	5.34	0.0248	1
11031	OCDD	3268-87-9	0.951 JBQ	10.7	0.0315	1
11031	2378-TCDF	51207-31-9	1.07 U	1.07	0.0319	1
11031	12378-PeCDF	57117-41-6	0.0916 JB	5.34	0.0247	1
11031	23478-PeCDF	57117-31-4	0.0804 JBQ	5.34	0.0248	1
11031	123478-HxCDF	70648-26-9	0.0724 JB	5.34	0.0142	1
11031	123678-HxCDF	57117-44-9	5.34 U	5.34	0.0134	1
11031	123789-HxCDF	72918-21-9	0.0595 JBQ	5.34	0.0170	1
11031	234678-HxCDF	60851-34-5	0.0642 JB	5.34	0.0126	1
11031	1234678-HpCDF	67562-39-4	0.0563 JBQ	5.34	0.00819	1
11031	1234789-HpCDF	55673-89-7	0.0521 JBQ	5.34	0.0124	1
11031	OCDF	39001-02-0	0.176 JBQ	10.7	0.0301	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0307			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13169SLH026	06/23/2013 12:43	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13169SLH026	06/19/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013 02:37	Laura M Krieger	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316431405	06/13/2013 14:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316431405	06/13/2013 14:35	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131680022A	06/18/2013 16:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131680022A	06/18/2013 02:30	Sherry L Morrow	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13170001	06/22/2013 07:13	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13170001	06/19/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	131640637001	06/17/2013 04:16	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	131640637001B	06/17/2013 12:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131640637001A	06/17/2013 12:22	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-826-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7091443
LLI Group # 1396835
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/12/2013 13:55

Submitted: 06/13/2013 09:15
Reported: 06/28/2013 08:31

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82614 SDG#: PH055-16*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	131640637001A	06/17/2013 12:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131640637001A	06/17/2013 12:22	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131640638001	06/16/2013 07:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131640637001	06/15/2013 11:34	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131640638001	06/15/2013 14:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13164039401A	06/13/2013 19:45	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13168WAC026	Sample number(s): 7091426-7091427									
Acenaphthene	0.050	U	0.050	0.010	ug/l	104	104	65-124	0	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	105	105	72-113	0	30
Anthracene	0.050	U	0.050	0.010	ug/l	107	105	70-117	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	97	97	75-115	0	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	105	98	72-120	7	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	116	109	74-130	7	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	97	91	70-130	6	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	113	96	63-121	16	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	109	98	74-118	11	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	88	96	40-138	8	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	102	102	70-145	0	30
Chrysene	0.050	U	0.050	0.010	ug/l	106	101	75-112	5	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	113	90	66-122	22	30
Diethylphthalate	0.067	J	1.0	0.050	ug/l	106	107	74-129	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	103	104	40-119	1	30
Bis(2-Ethylhexyl)phthalate	0.11	J	1.0	0.050	ug/l	77	69*	70-143	11	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	111	111	73-116	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	102	101	74-115	0	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	112	93	66-122	19	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	95	95	71-120	0	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	87	87	74-119	0	30
Naphthalene	0.050	U	0.050	0.030	ug/l	104	103	67-118	0	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	77	79	36-120	2	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	68	55*	57-145	21	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	108	107	72-109	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	107	105	71-116	2	30
Batch number: 13169SLH026	Sample number(s): 7091433-7091436,7091438-7091443									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	116*		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	105		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	101		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	105		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	103		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	104		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	116		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	107		70-130		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	106		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	95		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	108		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	96		71-120		
Batch number: 13168C20A	Sample number(s): 7091426-7091427,7091437									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	101	98	75-135	4	30
Batch number: 13169A16A	Sample number(s): 7091434,7091436,7091439,7091441-7091443									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 131640020A	Sample number(s): 7091426-7091427									
19b Formaldehyde 8315A	50	U	50.	30	ug/l	89	78	60-140	13	20
Batch number: 131680025A	Sample number(s): 7091428-7091432									
6a Perchlorate (Method 6850)	5.0	U	5.0	2.1	ug/kg	92		85-115		
Batch number: 131750023A	Sample number(s): 7091426-7091427									
6b Perchlorate (Method 6850)	1.0	U	1.0	0.20	ug/l	87		85-115		
Batch number: 131650013A	Sample number(s): 7091426-7091427									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	47	52	35-84	9	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	91	93	69-120	2	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	90	94	69-128	4	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 131650014A	Sample number(s): 7091426-7091427									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	93	104	55-126	11	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	105	116	63-132	10	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	90	99	63-132	10	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	92	104	68-128	12	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	90	97	62-143	7	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	101	113	56-137	12	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	84	88	45-134	4	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	91	103	63-131	12	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	97	106	65-135	9	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	94	105	48-124	11	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	79	86	53-123	9	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	80	87	60-129	9	30
Endrin	0.016	U	0.016	0.0065	ug/l	98	86	43-139	13	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	74	87	55-123	16	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	74	84	51-138	13	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	79	84	57-126	7	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	98	111	65-128	12	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	75	80	46-134	7	30
Mirex	0.20	U	0.20	0.068	ug/l					
Toxaphene	2.4	U	2.4	0.80	ug/l					
Batch number: 131680022A	Sample number(s): 7091433-7091436,7091438-7091443									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	99		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	102		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	94		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		49-107		
Batch number: 131700006A	Sample number(s): 7091426-7091427									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	91	91	70-130	1	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	94	95	70-130	1	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	94	98	70-130	4	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	87	96	70-130	10	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	72	74	70-130	2	30
Batch number: 131640635001	Sample number(s): 7091426-7091427									
Aluminum	0.400	U	0.400	0.0743	mg/l	99	101	90-112	2	20
Antimony	0.0400	U	0.0400	0.0035	mg/l	102	102	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	97	100	90-110	3	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	94	95	88-110	0	20
Boron	0.100	U	0.100	0.0083	mg/l	92	94	89-110	2	20
Cadmium	0.00045	J	0.0100	0.00036	mg/l	100	99	90-112	1	20
Calcium	0.400	U	0.400	0.0640	mg/l	98	100	90-110	2	20
Chromium	0.0300	U	0.0300	0.0011	mg/l	95	97	90-110	2	20
Cobalt	0.0100	U	0.0100	0.00066	mg/l	100	100	90-110	0	20
Copper	0.0200	U	0.0200	0.0021	mg/l	100	100	90-112	0	20
Iron	0.400	U	0.400	0.0333	mg/l	101	100	90-112	0	20
Lead	0.0300	U	0.0300	0.0051	mg/l	99	98	88-110	1	20
Lithium	0.0400	U	0.0400	0.0060	mg/l	99	100	90-110	1	20
Magnesium	0.200	U	0.200	0.0606	mg/l	98	98	90-110	0	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	99	98	90-110	1	20
Molybdenum	0.0200	U	0.0200	0.0029	mg/l	103	102	90-110	1	20
Nickel	0.0200	U	0.0200	0.0011	mg/l	102	101	90-111	1	20
Phosphorus	0.200	U	0.200	0.0052	mg/l	99	98	90-110	1	20
Potassium	1.00	U	1.00	0.145	mg/l	97	97	85-115	0	20
Sodium	2.00	U	2.00	0.167	mg/l	96	98	87-114	2	20
Tin	0.0400	U	0.0400	0.0022	mg/l	98	97	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	99	100	90-113	1	20
Vanadium	0.0100	U	0.0100	0.0013	mg/l	97	97	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	100	99	90-110	1	20
Zirconium	0.100	U	0.100	0.0092	mg/l	100	101	90-110	1	20
Batch number: 131640637001	Sample number(s): 7091433-7091436,7091438-7091443									
Aluminum	8.46	J	40.0	7.71	mg/kg	101		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	106		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	99		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Boron	10.0 U	10.0	0.830	mg/kg	95		80-120		
Cadmium	1.00 U	1.00	0.0330	mg/kg	103		80-120		
Calcium	9.77 J	20.0	4.02	mg/kg	102		80-120		
Chromium	3.00 U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00 U	1.00	0.0900	mg/kg	104		80-120		
Copper	2.00 U	2.00	0.180	mg/kg	102		80-120		
Iron	40.0 U	40.0	3.80	mg/kg	102		80-120		
Lead	3.00 U	3.00	0.470	mg/kg	104		80-120		
Lithium	4.0 U	4.0	0.55	mg/kg	103		80-120		
Magnesium	10.0 U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	100		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00 U	2.00	0.110	mg/kg	106		80-120		
Phosphorus	1.17 J	10.0	0.510	mg/kg	106		80-120		
Potassium	100 U	100.	13.5	mg/kg	97		80-120		
Sodium	100 U	100.	16.7	mg/kg	97		80-120		
Tin	1.48 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	101		80-120		
Vanadium	1.00 U	1.00	0.110	mg/kg	98		80-120		
Zinc	1.92 J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00 U	5.00	0.830	mg/kg	104		80-120		
Batch number: 131640637001A	Sample number(s): 7091433-7091436,7091438-7091443								
Silver	0.200 U	0.200	0.0200	mg/kg	103		80-120		
Strontium	0.0566 J	0.400	0.0340	mg/kg	103		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 131640637001B	Sample number(s): 7091433-7091436,7091438-7091443								
Selenium	0.400 U	0.400	0.100	mg/kg	109		80-120		
Batch number: 131640638001	Sample number(s): 7091433-7091436,7091438-7091443								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	96		85-120		
Batch number: 131640639001A	Sample number(s): 7091426-7091427								
Silver	0.0010 U	0.0010	0.00010	mg/l	102	99	90-115	2	20
Strontium	0.0020 U	0.0020	0.00022	mg/l	103	101	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	101	106	80-120	6	20
Batch number: 131640639001B	Sample number(s): 7091426-7091427								
Selenium	0.0040 U	0.0040	0.00050	mg/l	104	111	80-120	6	20
Batch number: 131695713005	Sample number(s): 7091426-7091427								
3b Mercury 7470A	0.00020 U	0.00020	0.00007 0	mg/l	101	98	90-115	3	20
Batch number: 13164621301B	Sample number(s): 7091426-7091427								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	101	101	90-110	0	20
Batch number: 13164003101A	Sample number(s): 7091426-7091427								
28b pH (9040B and 9040C)					100		99-103		
Batch number: 13164039401A	Sample number(s): 7091433-7091436,7091438-7091443								
15a pH by 9045D					99		95-105		

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Quality Control Summary

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Reported: 06/28/13 at 08:31 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13169162401A	Sample number(s): 7091428-7091436,7091438-7091440								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
Batch number: 13169162401B	Sample number(s): 7091441-7091443								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13170001	Sample number(s): 7091433-7091436,7091438-7091443								
2378-TCDD	0.0347 J	1.00	0.0287	ng/kg	95		67-158		
12378-PeCDD	0.144 J	5.00	0.0358	ng/kg	96		70-142		
123478-HxCDD	0.0858 J	5.00	0.0248	ng/kg	101		70-164		
123678-HxCDD	0.0555 J	5.00	0.0279	ng/kg	97		76-134		
123789-HxCDD	0.138 J	5.00	0.0267	ng/kg	96		64-162		
1234678-HpCDD	0.148 J	5.00	0.0231	ng/kg	96		70-140		
OCDD	0.396 J	10.0	0.0317	ng/kg	96		78-144		
2378-TCDF	0.0327 J	1.00	0.0280	ng/kg	94		75-158		
12378-PeCDF	0.101 J	5.00	0.0223	ng/kg	98		80-134		
23478-PeCDF	0.0778 J	5.00	0.0216	ng/kg	99		68-160		
123478-HxCDF	0.0903 J	5.00	0.0142	ng/kg	98		72-134		
123678-HxCDF	0.0923 J	5.00	0.0143	ng/kg	99		84-130		
123789-HxCDF	0.161 J	5.00	0.0168	ng/kg	95		78-130		
234678-HxCDF	0.0711 J	5.00	0.0144	ng/kg	98		70-156		
1234678-HpCDF	0.108 J	5.00	0.00990	ng/kg	95		82-122		
1234789-HpCDF	0.131 J	5.00	0.0138	ng/kg	95		78-138		
OCDF	0.215 J	10.0	0.0304	ng/kg	94		63-170		
Batch number: 13175002	Sample number(s): 7091426-7091427								
2378-TCDD	2.00 U	2.00	0.241	pg/l	93		60-150		
12378-PeCDD	0.425 J	10.0	0.312	pg/l	97		60-150		
123478-HxCDD	0.302 J	10.0	0.199	pg/l	104		60-150		
123678-HxCDD	0.363 J	10.0	0.208	pg/l	102		60-150		
123789-HxCDD	0.412 J	10.0	0.208	pg/l	104		60-150		
1234678-HpCDD	0.662 J	10.0	0.204	pg/l	99		60-150		
OCDD	2.17 J	20.0	0.255	pg/l	100		60-150		
2378-TCDF	2.00 U	2.00	0.189	pg/l	97		60-150		
12378-PeCDF	0.995 J	10.0	0.149	pg/l	101		60-150		
23478-PeCDF	0.342 J	10.0	0.139	pg/l	101		60-150		
123478-HxCDF	0.472 J	10.0	0.0971	pg/l	104		60-150		
123678-HxCDF	0.342 J	10.0	0.0976	pg/l	102		60-150		
123789-HxCDF	0.509 J	10.0	0.100	pg/l	103		60-150		
234678-HxCDF	0.235 J	10.0	0.0978	pg/l	103		60-150		
1234678-HpCDF	0.488 J	10.0	0.100	pg/l	101		60-150		
1234789-HpCDF	0.650 J	10.0	0.114	pg/l	101		60-150		
OCDF	1.36 J	20.0	0.288	pg/l	102		60-150		
Batch number: 13170001	Sample number(s): 7091433-7091436,7091438-7091443								
TEQ WHO 2005 - EDLx0.0	0.0603			ng/kg					
Batch number: 13175002	Sample number(s): 7091426-7091427								
TEQ WHO 2005 - EDLx0.0	0.0593			pg/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13169SLH026	Sample number(s): 7091433-7091436,7091438-7091443 UNSPK: 7091433								
Acenaphthene	89	95	48-127	8	30				
Acenaphthylene	106	112	49-121	6	30				
Anthracene	96	104	52-126	9	30				
Benzo(a)anthracene	93	101	32-135	10	30				
Benzo(a)pyrene	90	99	36-138	10	30				
Benzo(b)fluoranthene	98	108	26-142	11	30				
Benzo(e)pyrene	84	91	70-130	10	30				
Benzo(g,h,i)perylene	74	82	33-141	11	30				
Benzo(k)fluoranthene	92	101	47-129	10	30				
Butylbenzylphthalate	106	117	59-153	11	30				
Di-n-butylphthalate	103	111	62-154	9	30				
Chrysene	86	95	29-148	10	30				
Dibenz(a,h)anthracene	84	93	34-125	11	30				
Diethylphthalate	107	116	76-127	8	30				
Dimethylphthalate	97	106	62-136	9	30				
Bis(2-Ethylhexyl)phthalate	89	107	39-167	15	30				
Fluoranthene	92	99	47-135	8	30				
Fluorene	91	97	50-129	8	30				
Indeno(1,2,3-cd)pyrene	81	89	17-136	11	30				
1-Methylnaphthalene	94	100	50-131	7	30				
2-Methylnaphthalene	93	100	28-144	8	30				
Naphthalene	92	99	31-148	8	30				
N-Nitrosodimethylamine	93	96	48-113	4	30				
Di-n-octylphthalate	109	115	52-162	5	30				
Phenanthrene	88	94	29-142	8	30				
Pyrene	87	94	26-143	9	30				
Batch number: 13169A16A	Sample number(s): 7091434,7091436,7091439,7091441-7091443 UNSPK: P088264								
11a TPH by EPA 8015B GRO	79	86	39-118	10	30				
Batch number: 131680025A	Sample number(s): 7091428-7091432 UNSPK: 7091428								
6a Perchlorate (Method 6850)	91	92	80-120	0	20				
Batch number: 131750023A	Sample number(s): 7091426-7091427 UNSPK: P094365								
6b Perchlorate (Method 6850)	90	89	80-120	1	20				
Batch number: 131680022A	Sample number(s): 7091433-7091436,7091438-7091443 UNSPK: P089812								
EFH (C12-C14)	100	89	49-123	12	20				
EFH (C15-C20)	152*	156*	49-123	2	20				
EFH (C21-C30)	46*	162*	49-123	33*	20				
EFH (C30-C40)	-47 (2)	342 (2)	49-123	62*	20				
EFH (C8-C11)	87	74	49-123	16	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131640637001	Sample number(s): 7091433-7091436,7091438-7091443					UNSPK: P085556	BKG: P085556		
Aluminum	1575 (2)	1333 (2)	75-125	3	20	14,600	14,300	2	20
Antimony	61*	61*	75-125	0	20	3.88 U	3.88 U	0 (1)	20
Arsenic	99	98	75-125	1	20	4.93	5.27	7 (1)	20
Barium	102	100	75-125	1	20	105	106	1	20
Beryllium	100	100	75-125	0	20	0.626 J	0.624 J	0 (1)	20
Boron	96	95	75-125	0	20	4.64 J	3.81 J	20 (1)	20
Cadmium	96	95	75-125	1	20	0.971 U	0.971 U	0 (1)	20
Calcium	133 (2)	120 (2)	75-125	2	20	2,420	2,300	5	20
Chromium	113	107	75-125	3	20	22.0	22.3	1	20
Cobalt	95	94	75-125	1	20	5.48	5.86	7	20
Copper	100	100	75-125	0	20	11.6	11.6	0	20
Iron	767 (2)	-175 (2)	75-125	5	20	19,000	19,300	2	20
Lead	97	95	75-125	1	20	8.32	8.57	3 (1)	20
Lithium	105	103	75-125	1	20	23.2	23.2	0	20
Magnesium	216 (2)	144 (2)	75-125	3	20	4,390	4,400	0	20
Manganese	115 (2)	79 (2)	75-125	5	20	321	334	4	20
Molybdenum	95	95	75-125	0	20	0.687 J	0.500 J	32* (1)	20
Nickel	97	97	75-125	0	20	14.7	14.8	1	20
Phosphorus	97 (2)	72 (2)	75-125	5	20	429	415	3	20
Potassium	135 (2)	126 (2)	75-125	2	20	3,930	3,910	0	20
Sodium	97	97	75-125	1	20	69.7 J	68.3 J	2 (1)	20
Tin	90	90	75-125	0	20	2.75 J	2.75 J	0 (1)	20
Titanium	321 (2)	280 (2)	75-125	3	20	1,170	1,140	3	20
Vanadium	106	102	75-125	2	20	37.2	37.6	1	20
Zinc	100	97	75-125	2	20	62.6	62.3	0	20
Zirconium	92	91	75-125	1	20	2.86 J	3.45 J	19 (1)	20
Batch number: 131640637001A	Sample number(s): 7091433-7091436,7091438-7091443					UNSPK: P085556	BKG: P085556		
Silver	112	122	75-125	8	20	0.0429 J	0.0940 J	75* (1)	20
Strontium	121	153*	75-125	7	20	22.8	30.2	28*	20
Thallium	138*	137*	75-125	0	20	0.299	0.397	28* (1)	20
Batch number: 131640637001B	Sample number(s): 7091433-7091436,7091438-7091443					UNSPK: P085556	BKG: P085556		
Selenium	111	117	75-125	5	20	0.148 J	0.230 J	43* (1)	20
Batch number: 131640638001	Sample number(s): 7091433-7091436,7091438-7091443					UNSPK: P081064	BKG: P081064		
3a Mercury 7471A	100	98	65-135	5	20	0.0165 U	0.0159 U	0 (1)	20
Batch number: 13164003101A	Sample number(s): 7091426-7091427					BKG: P091337			
28b pH (9040B and 9040C)						7.6	7.7	1	3
Batch number: 13164039401A	Sample number(s): 7091433-7091436,7091438-7091443					BKG: 7091434			
15a pH by 9045D						6.85	6.90	1	3
Batch number: 13169162401A	Sample number(s): 7091428-7091436,7091438-7091440					BKG: 7091428			
14a Moisture Content by 160.3						2.6	2.6	0	20
14a Moisture Content by 160.3						2.6	2.6	0	20
14a Moisture Content by 160.3						2.6	2.6	0	20

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13169162401B	Sample number(s): 7091441-7091443					BKG: 7091441			
14a Moisture Content by 160.3						8.3	8.1	3	20
Batch number: 13170001	Sample number(s): 7091433-7091436,7091438-7091443					UNSPK: P089812			
2378-TCDD	91	92	40-135	0	20				
12378-PeCDD	96	97	40-135	0	20				
123478-HxCDD	96	94	40-135	4	20				
123678-HxCDD	95	96	40-135	1	20				
123789-HxCDD	93	93	40-135	1	20				
1234678-HpCDD	47	51	40-135	3	20				
OCDD	-442 (2)	-404 (2)	40-135	28*	20				
2378-TCDF	96	92	40-135	5	20				
12378-PeCDF	95	96	40-135	0	20				
23478-PeCDF	98	99	40-135	0	20				
123478-HxCDF	98	100	40-135	0	20				
123678-HxCDF	99	99	40-135	2	20				
123789-HxCDF	95	95	40-135	1	20				
234678-HxCDF	99	97	40-135	4	20				
1234678-HpCDF	92	94	40-135	0	20				
1234789-HpCDF	95	95	40-135	2	20				
OCDF	88	89	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13168WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7091426	100	103	92
7091427	108	109	94
Blank	111	117	99
LCS	105	110	97
LCSD	105	101	97
Limits:	64-120	62-141	58-134

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13169SLH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7091433	82	91	94
7091434	83	92	95

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Surrogate Quality Control

7091435	83	91	94
7091436	81	89	92
7091438	79	87	90
7091439	80	89	89
7091440	68	70	85
7091441	83	91	96
7091442	82	89	95
7091443	76	83	89
Blank	83	90	96
LCS	85	93	99
MS	75	84	87
MSD	82	94	95
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13168C20A

	Trifluorotoluene-F
7091426	86
7091427	88
7091437	85
Blank	86
LCS	112
LCSD	111
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13169A16A

	Trifluorotoluene-F
7091434	87
7091436	88
7091439	85
7091441	86
7091442	93
7091443	83
Blank	95
LCS	87
MS	85
MSD	84
Limits:	61-122

Analysis Name: 19b Formaldehyde 8315A
Batch number: 131640020A

	Butyraldehyde
7091426	98
7091427	75
Blank	97
LCS	99
LCSD	82
Limits:	45-145

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Surrogate Quality Control

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 131650013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7091426	106	58
7091427	108	83
Blank	98	86
LCS	101	51
LCSD	101	63
Limits:	45-120	45-120

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 131650014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7091426	94	59
7091427	94	74
Blank	92	75
LCS	90	65
LCSD	97	71
Limits:	60-140	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131680022A

	Chlorobenzene	Orthoterphenyl
7091433	92	95
7091434	95	98
7091435	94	97
7091436	95	97
7091438	95	98
7091439	93	97
7091440	96	101
7091441	97	99
7091442	97	99
7091443	94	96
Blank	95	99
LCS	96	101
MS	100	103
MSD	90	89
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131700006A

	Chlorobenzene	Orthoterphenyl
7091426	91	76
7091427	92	80
Blank	77	78
LCS	91	92
LCSD	94	96

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Surrogate Quality Control

Limits: 45-126 69-119

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13170001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7091433	64	68	69	78	83	70
7091434	76	75	72	80	86	89
7091435	73	74	74	84	82	82
7091436	90	92	85	98	96	97
7091438	76	77	76	85	89	87
7091439	68	74	72	81	88	79
7091440	79	79	77	84	90	93
7091441	64	70	69	78	74	76
7091442	72	76	72	83	85	82
7091443	64	69	73	81	83	75
Blank	78	80	84	87	86	84
MS	82	80	80	83	87	91
MSD	65	66	66	70	72	68
OPR	63	67	70	74	71	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7091433	93	64	61	71	87	82
7091434	104	72	67	77	86	84
7091435	110	68	65	78	83	84
7091436	137	86	78	96	102	103
7091438	108	72	70	81	90	88
7091439	114	72	66	79	90	88
7091440	106	78	79	83	89	87
7091441	105	67	60	70	75	78
7091442	106	72	68	81	83	84
7091443	104	78	76	73	84	83
Blank	91	82	80	83	86	89
MS	93	81	83	82	93	89
MSD	79	68	67	67	75	72
OPR	86	74	75	71	75	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7091433	80	76	79	60	74
7091434	84	86	85	65	81
7091435	84	86	91	62	82
7091436	102	107	109	76	103
7091438	88	87	92	66	84
7091439	88	93	95	61	82
7091440	87	90	98	69	86
7091441	79	83	83	59	75
7091442	85	89	91	66	87
7091443	83	89	94	61	75
Blank	88	86	88	71	81
MS	88	88	92	72	81

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1396835
Reported: 06/28/13 at 08:31 AM

Surrogate Quality Control

MSD	73	74	76	59	67
OPR	77	81	86	59	68
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13175002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7091426	67	72	83	82	83	84
7091427	70	73	83	83	83	91
Blank	58	62	74	72	72	82
OPR	72	77	88	87	86	96
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7091426	82	83	83	70	74	78
7091427	82	83	83	69	75	77
Blank	70	71	70	58	66	68
OPR	86	89	88	73	77	79
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7091426	76	75	76	67	70
7091427	75	75	74	72	72
Blank	67	65	63	60	60
OPR	76	79	80	72	76
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

13013 1396835 7091426-43

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/12/2013
CarrierName: FedEx
AirbillNo: 799987261502

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130612-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-061213	6/12/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																							
EB1-061213	6/12/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X												
EB1-061213	6/12/13 15:00	WQ	None	2 - 250 mL Poly	10 day														X	X																	
EB1-061213	6/12/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																													
EB1-061213	6/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day										X																						

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shuyi Mupe	06/12/13	1600									
									Pat Yu	6/13/13	0915

COC Rev 2

COC: 20130612-01, Page 1 of 1

1 of 1

13013 1396835 7091426-43

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/12/2013
CarrierName: FedEx
AirbillNo: 799987261502

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130612-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-061213	6/12/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																							
EB2-061213	6/12/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																				X												
EB2-061213	6/12/13 15:30	WQ	None	2 - 250 mL Poly	10 day														X	X																	
EB2-061213	6/12/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																													
EB2-061213	6/12/13 15:30	WQ	None	1 - 250 mL Amber	10 day										X																						

Special Instructions:

Sampler: Pat Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephanie Pope	6/12/13	1600									
									Pat Gu	6/13/13	0915

13013 1396835 7091426-43

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/12/2013
CarrierName: FedEx
AirbillNo: 799987261502

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130612-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	PCBs/PCTs 8082	Dioxins 1613	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Terphenyls 8015	Alcohols 8015	Glycols 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-061213	6/12/13 15:00	WQ	None	3 - 250 mL Amber	10 day							X										X										X				
EB1-061213	6/12/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB1-061213	6/12/13 15:00	WQ	None	1 - 40 mL Vial	10 day												X																			
EB2-061213	6/12/13 15:30	WQ	None	3 - 250 mL Amber	10 day							X										X										X				
EB2-061213	6/12/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB2-061213	6/12/13 15:30	WQ	None	1 - 40 mL Vial	10 day												X																			

Special Instructions:

Sampler: Pam Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shipped	06/12/13	1600									
									Patty	6/13/13	0915

13013 1396835 7091426-43

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/12/2013
CarrierName: FedEx
AirbillNo: 799987261502

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130612-04
Cooler #: 4
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-778-SA5A-SB-0.0-0.5MS	6/12/13 08:35	SO	None	3 - SS-Sleeve	10 day												X																			MS/MSD
SL-1178-SA5A-SB-0.0-0.5	6/12/13 08:45	SO	None	1 - SS-Sleeve	10 day												X																			
SL-778-SA5A-SB-4.0-5.0	6/12/13 09:00	SO	None	1 - 16 oz glass	10 day												X																			
SL-781-SA5A-SB-0.0-0.5	6/12/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-781-SA5A-SB-0.0-0.5	6/12/13 09:40	SO	None	1 - 4 oz glass	10 day														X																	
SL-781-SA5A-SB-2.0-3.0	6/12/13 09:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X					X						X											
SL-782-SA5A-SB-0.0-0.5	6/12/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-782-SA5A-SB-0.0-0.5	6/12/13 10:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-782-SA5A-SB-4.5-5.5	6/12/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X					X						X											
TB-061213	6/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-781-SA5A-SB-2.0-3.0	6/12/13 09:50	SO	None	2 - Encore	10 day																			X												
SL-782-SA5A-SB-4.5-5.5	6/12/13 10:40	SO	None	2 - Encore	10 day																			X												
SL-784-SA5A-SB-2.5-3.5	6/12/13 14:55	SO	None	2 - Encore	10 day																			X												
SL-826-SA5A-SB-4.0-5.0	6/12/13 13:25	SO	None	2 - Encore	10 day																			X												
SL-826-SA5A-SB-9.0-10.0	6/12/13 13:40	SO	None	2 - Encore	10 day																			X												
SL-826-SA5A-SB-14.0-15.0	6/12/13 13:55	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	6/12/13	1600									
									[illegible]	6/13/13	0915

13013 1396835 7091426-43

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/12/2013
CarrierName: FedEx
AirbillNo: 799987499247

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130612-05
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terpenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-784-SA5A-SB-0.0-0.5	6/12/13 14:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-784-SA5A-SB-0.0-0.5	6/12/13 14:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-784-SA5A-SB-2.5-3.5	6/12/13 14:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-826-SA5A-SB-0.0-0.5	6/12/13 13:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-826-SA5A-SB-0.0-0.5	6/12/13 13:15	SO	None	1 - 4 oz glass	10 day													X																		
SL-826-SA5A-SB-4.0-5.0	6/12/13 13:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-826-SA5A-SB-9.0-10.0	6/12/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-826-SA5A-SB-14.0-15.0	6/12/13 13:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											

Special Instructions:

Sampler: V. Cortez

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shay Myers	6/12/13	16:00									
									Pat Gu	6/13/13	0915

COC Rev 2

COC: 20130612-05, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1396835

Client/Project: CDM Smith

Date of Receipt: 6/13/13

Time of Receipt: 0915

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	Y	B	
2	↓	0.9	↓	↓	↓	↓	
3	↓	1.0	↓	↓	↓	↓	
4	↓	1.0	↓	↓	↓	↓	
5	↓	1.1	↓	↓	↓	↓	
6	—		—	—	—	—	—

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/13/13 1053

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 26, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/14/2013
Group Number: 1397198
SDG: PH056
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-792-SA5A-SB-0.0-0.5 Soil	7093172
SL-793-SA5A-SB-0.0-0.5 Soil	7093173
SL-795-SA5A-SB-0.0-0.5 Soil	7093174
SL-790-SA5A-SB-0.0-0.5 Soil	7093175
SL-791-SA5A-SB-0.0-0.5 Soil	7093176
SL-775-SA5A-SB-0.0-0.5 Soil	7093177

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	27		18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	100		18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	2.4	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	6.1	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		40.0	7.70	1
06944	Antimony	7440-36-0	0.639	J	4.00	0.499	1
06935	Arsenic	7440-38-2	5.28		4.00	0.330	1
06946	Barium	7440-39-3	76.4		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.654	J	0.999	0.0669	1
07914	Boron	7440-42-8	1.68	J	9.99	0.829	1
06949	Cadmium	7440-43-9	0.999	U	0.999	0.0330	1
01650	Calcium	7440-70-2	2,280		20.0	4.02	1
06951	Chromium	7440-47-3	18.9		3.00	0.0879	1
06952	Cobalt	7440-48-4	6.60		0.999	0.0899	1
06953	Copper	7440-50-8	7.72		2.00	0.180	1
01654	Iron	7439-89-6	22,900		40.0	3.80	1
06955	Lead	7439-92-1	5.16		3.00	0.469	1
01656	Lithium	7439-93-2	23.0		4.0	0.55	1
01657	Magnesium	7439-95-4	4,940		9.99	1.73	1
06958	Manganese	7439-96-5	270		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.187	J	2.00	0.170	1
06961	Nickel	7440-02-0	9.93		2.00	0.110	1
10145	Phosphorus	7723-14-0	246		9.99	0.509	1
01662	Potassium	7440-09-7	2,150		99.9	13.5	1
01667	Sodium	7440-23-5	97.4	J	99.9	16.7	1
06969	Tin	7440-31-5	2.90	J	9.99	0.220	1
06970	Titanium	7440-32-6	1,190		0.999	0.170	1
06971	Vanadium	7440-62-2	32.3		0.999	0.110	1
06972	Zinc	7440-66-6	52.0		4.00	0.200	1
10146	Zirconium	7440-67-7	2.69	J	4.99	0.829	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.400	U	0.400	0.0999	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0200	2
06144	Strontium	7440-24-6	17.8		0.400	0.0340	2
06145	Thallium	7440-28-0	0.276		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.55		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01 U	1.01	0.0269	1
11031	12378-PeCDD	40321-76-4	0.0821 JBQ	5.05	0.0311	1
11031	123478-HxCDD	39227-28-6	0.0963 JBQ	5.05	0.0256	1
11031	123678-HxCDD	57653-85-7	0.161 J	5.05	0.0267	1
11031	123789-HxCDD	19408-74-3	0.159 JBQ	5.05	0.0267	1
11031	1234678-HpCDD	35822-46-9	2.22 JB	5.05	0.0372	1
11031	OCDD	3268-87-9	33.2 B	10.1	0.0289	1
11031	2378-TCDF	51207-31-9	1.01 U	1.01	0.0204	1
11031	12378-PeCDF	57117-41-6	0.128 JB	5.05	0.0192	1
11031	23478-PeCDF	57117-31-4	0.0775 JBQ	5.05	0.0176	1
11031	123478-HxCDF	70648-26-9	0.102 JB	5.05	0.0225	1
11031	123678-HxCDF	57117-44-9	0.0745 JBQ	5.05	0.0221	1
11031	123789-HxCDF	72918-21-9	0.0613 JBQ	5.05	0.0249	1
11031	234678-HxCDF	60851-34-5	0.0448 JBQ	5.05	0.0218	1
11031	1234678-HpCDF	67562-39-4	0.426 JBQ	5.05	0.0152	1
11031	1234789-HpCDF	55673-89-7	0.0772 JBQ	5.05	0.0208	1
11031	OCDF	39001-02-0	1.66 JB	10.1	0.0264	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0628			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	99	23 - 140
13C12-OCDD	106	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	96	26 - 152
13C12-123678-HxCDF	101	26 - 123
13C12-234678-HxCDF	98	28 - 136
13C12-123789-HxCDF	101	29 - 147
13C12-1234678-HpCDF	121	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	103	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 13:14	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/22/2013 15:26	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 22:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/24/2013 00:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:21	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:25	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:25	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:25	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-792-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093172
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 10:05 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL792 SDG#: PH056-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:25	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:52	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	0.41	J	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	0.88	J	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	3.0		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.98	J	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	0.93	J	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	6.9	J	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.3		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.0	1
12969	Fluoranthene	206-44-0	2.6		1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.88	J	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	0.70	J	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	66		18	6.0	1
12969	Phenanthrene	85-01-8	2.2		1.7	0.66	1
12969	Pyrene	129-00-0	2.2		1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	6.0		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		40.0	7.71	1
06944	Antimony	7440-36-0	0.529	J	4.00	0.500	1
06935	Arsenic	7440-38-2	5.04		4.00	0.330	1
06946	Barium	7440-39-3	92.2		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.548	J	1.00	0.0670	1
07914	Boron	7440-42-8	2.99	J	10.0	0.830	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0330	1
01650	Calcium	7440-70-2	2,340		20.0	4.02	1
06951	Chromium	7440-47-3	17.8		3.00	0.0880	1
06952	Cobalt	7440-48-4	4.55		1.00	0.0900	1
06953	Copper	7440-50-8	8.98		2.00	0.180	1
01654	Iron	7439-89-6	19,000		40.0	3.80	1
06955	Lead	7439-92-1	9.43		3.00	0.470	1
01656	Lithium	7439-93-2	20.6		4.0	0.55	1
01657	Magnesium	7439-95-4	3,740		10.0	1.73	1
06958	Manganese	7439-96-5	276		1.00	0.0830	1
06960	Molybdenum	7439-98-7	0.395	J	2.00	0.170	1
06961	Nickel	7440-02-0	10.3		2.00	0.110	1
10145	Phosphorus	7723-14-0	449		10.0	0.510	1
01662	Potassium	7440-09-7	3,380		100	13.5	1
01667	Sodium	7440-23-5	68.8	J	100	16.7	1
06969	Tin	7440-31-5	2.58	J	10.0	0.220	1
06970	Titanium	7440-32-6	991		1.00	0.170	1
06971	Vanadium	7440-62-2	29.6		1.00	0.110	1
06972	Zinc	7440-66-6	52.0		4.00	0.200	1
10146	Zirconium	7440-67-7	2.84	J	5.00	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.127	J	0.400	0.100	2
06142	Silver	7440-22-4	0.103	J	0.200	0.0200	2
06144	Strontium	7440-24-6	17.7		0.400	0.0340	2
06145	Thallium	7440-28-0	0.226		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0105	J	0.0157	0.0094	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.36		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.190	JQ	0.993	0.0285	1
11031	12378-PeCDD	40321-76-4	1.29	JB	4.97	0.0413	1
11031	123478-HxCDD	39227-28-6	2.12	JB	4.97	0.0405	1
11031	123678-HxCDD	57653-85-7	5.78		4.97	0.0433	1
11031	123789-HxCDD	19408-74-3	4.78	JB	4.97	0.0401	1
11031	1234678-HpCDD	35822-46-9	167	B	4.97	0.107	1
11031	OCDD	3268-87-9	2,940	B	9.93	0.0645	1
11031	2378-TCDF	51207-31-9	0.225	J	0.993	0.0353	1
11031	12378-PeCDF	57117-41-6	0.468	JBQ	4.97	0.0234	1
11031	23478-PeCDF	57117-31-4	0.461	JBQ	4.97	0.0217	1
11031	123478-HxCDF	70648-26-9	0.721	JB	4.97	0.0241	1
11031	123678-HxCDF	57117-44-9	0.503	JB	4.97	0.0243	1
11031	123789-HxCDF	72918-21-9	0.422	JB	4.97	0.0267	1
11031	234678-HxCDF	60851-34-5	0.686	JB	4.97	0.0234	1
11031	1234678-HpCDF	67562-39-4	17.0	B	4.97	0.0240	1
11031	1234789-HpCDF	55673-89-7	1.30	JB	4.97	0.0296	1
11031	OCDF	39001-02-0	89.9	B	9.93	0.0251	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	5.58				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	86	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	95	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 13:46	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/26/2013 02:14	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 22:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/24/2013 22:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:25	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:27	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:27	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:27	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-793-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093173
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 11:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL793 SDG#: PH056-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:27	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:54	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	0.40	J	1.7	0.34	1
12969	Anthracene	120-12-7	1.8		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.78	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.68	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	3.6		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	4.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	18	6.1	1
12969	Fluoranthene	206-44-0	12		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	46		18	6.1	1
12969	Phenanthrene	85-01-8	6.9		1.7	0.67	1
12969	Pyrene	129-00-0	7.0		1.7	0.67	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	34	U	34	10	1
10592	Aroclor 5442	12642-23-8	34	U	34	10	1
10592	Aroclor 5460	11126-42-4	34	U	34	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.4	1
10592	PCB-1221	11104-28-2	17	U	17	5.2	1
10592	PCB-1232	11141-16-5	17	U	17	4.2	1
10592	PCB-1242	53469-21-9	17	U	17	4.2	1
10592	PCB-1248	12672-29-6	17	U	17	3.4	1
10592	PCB-1254	11097-69-1	17	U	17	4.5	1
10592	PCB-1260	11096-82-5	17	U	17	4.0	1
10592	PCB-1262	37324-23-5	17	U	17	3.4	1
10592	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	4.2	J	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	16		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	26		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		40.7	7.84	1
06944	Antimony	7440-36-0	0.601	J	4.07	0.508	1
06935	Arsenic	7440-38-2	5.52		4.07	0.335	1
06946	Barium	7440-39-3	95.6		1.02	0.0335	1
06947	Beryllium	7440-41-7	0.600	J	1.02	0.0681	1
07914	Boron	7440-42-8	2.78	J	10.2	0.844	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0335	1
01650	Calcium	7440-70-2	2,500		20.3	4.09	1
06951	Chromium	7440-47-3	29.9		3.05	0.0895	1
06952	Cobalt	7440-48-4	5.27		1.02	0.0915	1
06953	Copper	7440-50-8	11.3		2.03	0.183	1
01654	Iron	7439-89-6	21,200		40.7	3.86	1
06955	Lead	7439-92-1	9.08		3.05	0.478	1
01656	Lithium	7439-93-2	22.0		4.1	0.56	1
01657	Magnesium	7439-95-4	4,170		10.2	1.76	1
06958	Manganese	7439-96-5	300		1.02	0.0844	1
06960	Molybdenum	7439-98-7	0.560	J	2.03	0.173	1
06961	Nickel	7440-02-0	16.1		2.03	0.112	1
10145	Phosphorus	7723-14-0	510		10.2	0.518	1
01662	Potassium	7440-09-7	3,600		102	13.7	1
01667	Sodium	7440-23-5	75.5	J	102	17.0	1
06969	Tin	7440-31-5	2.74	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,030		1.02	0.173	1
06971	Vanadium	7440-62-2	34.4		1.02	0.112	1
06972	Zinc	7440-66-6	57.4		4.07	0.203	1
10146	Zirconium	7440-67-7	3.01	J	5.08	0.844	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.151	J	0.407	0.102	2
06142	Silver	7440-22-4	0.316		0.203	0.0203	2
06144	Strontium	7440-24-6	17.7		0.407	0.0346	2
06145	Thallium	7440-28-0	0.231		0.203	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0122	J	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.55		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.14		1.02	0.0431	1
11031	12378-PeCDD	40321-76-4	9.96	B	5.09	0.0927	1
11031	123478-HxCDD	39227-28-6	16.3	B	5.09	0.0674	1
11031	123678-HxCDD	57653-85-7	34.4		5.09	0.0704	1
11031	123789-HxCDD	19408-74-3	39.0	B	5.09	0.0704	1
11031	1234678-HpCDD	35822-46-9	955	B	5.09	0.213	1
11031	OCDD	3268-87-9	22,100	B	10.2	0.110	10
11031	2378-TCDF	51207-31-9	0.227	JQ	1.02	0.0425	1
11031	12378-PeCDF	57117-41-6	0.607	JB	5.09	0.0265	1
11031	23478-PeCDF	57117-31-4	0.618	JB	5.09	0.0248	1
11031	123478-HxCDF	70648-26-9	2.91	JB	5.09	0.0332	1
11031	123678-HxCDF	57117-44-9	0.968	JB	5.09	0.0304	1
11031	123789-HxCDF	72918-21-9	0.841	JBQ	5.09	0.0355	1
11031	234678-HxCDF	60851-34-5	1.48	JB	5.09	0.0291	1
11031	1234678-HpCDF	67562-39-4	46.3	B	5.09	0.0263	1
11031	1234789-HpCDF	55673-89-7	2.07	JB	5.09	0.0348	1
11031	OCDF	39001-02-0	173	B	10.2	0.0420	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	39.6				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	92	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	92	26 - 138
13C12-OCDF	100	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 14:17	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/26/2013 02:32	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 23:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/24/2013 23:23	Joseph D Anderson	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/25/2013 13:01	Joseph D Anderson	10
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:29	David K Beck	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-795-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093174
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 09:20 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL795 SDG#: PH056-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:29	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:29	David K Beck	2
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:29	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.67	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.2	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	60		18	6.0	1
12969	Phenanthrene	85-01-8	0.93	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	8.3		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	22		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		40.5	7.81	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.506	1
06935	Arsenic	7440-38-2	4.61		4.05	0.334	1
06946	Barium	7440-39-3	104		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.602	J	1.01	0.0678	1
07914	Boron	7440-42-8	3.39	J	10.1	0.840	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0334	1
01650	Calcium	7440-70-2	2,200		20.2	4.07	1
06951	Chromium	7440-47-3	17.5		3.04	0.0891	1
06952	Cobalt	7440-48-4	4.97		1.01	0.0911	1
06953	Copper	7440-50-8	8.91		2.02	0.182	1
01654	Iron	7439-89-6	19,600		40.5	3.85	1
06955	Lead	7439-92-1	8.09		3.04	0.476	1
01656	Lithium	7439-93-2	20.5		4.0	0.56	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,750		10.1	1.75	1
06958	Manganese	7439-96-5	313		1.01	0.0840	1
06960	Molybdenum	7439-98-7	0.452	J	2.02	0.172	1
06961	Nickel	7440-02-0	11.0		2.02	0.111	1
10145	Phosphorus	7723-14-0	399		10.1	0.516	1
01662	Potassium	7440-09-7	3,070		101	13.7	1
01667	Sodium	7440-23-5	84.2	J	101	16.9	1
06969	Tin	7440-31-5	2.71	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,060		1.01	0.172	1
06971	Vanadium	7440-62-2	31.2		1.01	0.111	1
06972	Zinc	7440-66-6	51.2		4.05	0.202	1
10146	Zirconium	7440-67-7	2.92	J	5.06	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.134	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0556	J	0.202	0.0202	2
06144	Strontium	7440-24-6	20.6		0.405	0.0344	2
06145	Thallium	7440-28-0	0.225		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0103	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.25		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317	JQ	1.01	0.0202	1
11031	12378-PeCDD	40321-76-4	0.295	JB	5.04	0.0262	1
11031	123478-HxCDD	39227-28-6	0.447	JB	5.04	0.0330	1
11031	123678-HxCDD	57653-85-7	1.27	J	5.04	0.0343	1
11031	123789-HxCDD	19408-74-3	1.10	JB	5.04	0.0340	1
11031	1234678-HpCDD	35822-46-9	35.8	B	5.04	0.0613	1
11031	OCDD	3268-87-9	854	B	10.1	0.0400	1
11031	2378-TCDF	51207-31-9	0.196	JQ	1.01	0.0239	1
11031	12378-PeCDF	57117-41-6	0.249	JB	5.04	0.0164	1
11031	23478-PeCDF	57117-31-4	0.181	JB	5.04	0.0154	1
11031	123478-HxCDF	70648-26-9	0.248	JB	5.04	0.0177	1
11031	123678-HxCDF	57117-44-9	0.213	JB	5.04	0.0174	1
11031	123789-HxCDF	72918-21-9	0.236	JBQ	5.04	0.0215	1
11031	234678-HxCDF	60851-34-5	0.258	JB	5.04	0.0178	1
11031	1234678-HpCDF	67562-39-4	4.49	JB	5.04	0.0147	1
11031	1234789-HpCDF	55673-89-7	0.325	JB	5.04	0.0203	1
11031	OCDF	39001-02-0	15.1	B	10.1	0.0225	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.38				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 14:49	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 23:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/25/2013 13:58	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:33	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:32	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:32	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:32	David K Beck	2
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:32	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 11:58	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-790-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093175
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:40 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL790 SDG#: PH056-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	0.91	J	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	1.3	J	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	3.1		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.99	J	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	1.2	J	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.4		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	18	6.0	1
12969	Fluoranthene	206-44-0	2.4		1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.89	J	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	0.73	J	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	80		18	6.0	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.66	1
12969	Pyrene	129-00-0	2.2		1.7	0.66	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	35		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		39.2	7.56	1
06944	Antimony	7440-36-0	0.757	J	3.92	0.490	1
06935	Arsenic	7440-38-2	4.55		3.92	0.324	1
06946	Barium	7440-39-3	108		0.981	0.0324	1
06947	Beryllium	7440-41-7	0.588	J	0.981	0.0657	1
07914	Boron	7440-42-8	3.18	J	9.81	0.814	1
06949	Cadmium	7440-43-9	0.981	U	0.981	0.0324	1
01650	Calcium	7440-70-2	2,090		19.6	3.94	1
06951	Chromium	7440-47-3	18.0		2.94	0.0863	1
06952	Cobalt	7440-48-4	4.85		0.981	0.0883	1
06953	Copper	7440-50-8	9.94		1.96	0.177	1
01654	Iron	7439-89-6	19,700		39.2	3.73	1
06955	Lead	7439-92-1	9.25		2.94	0.461	1
01656	Lithium	7439-93-2	19.2		3.9	0.54	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,620		9.81	1.70	1
06958	Manganese	7439-96-5	318		0.981	0.0814	1
06960	Molybdenum	7439-98-7	0.471	J	1.96	0.167	1
06961	Nickel	7440-02-0	11.3		1.96	0.108	1
10145	Phosphorus	7723-14-0	398		9.81	0.500	1
01662	Potassium	7440-09-7	3,350		98.1	13.2	1
01667	Sodium	7440-23-5	78.3	J	98.1	16.4	1
06969	Tin	7440-31-5	2.64	J	9.81	0.216	1
06970	Titanium	7440-32-6	1,030		0.981	0.167	1
06971	Vanadium	7440-62-2	31.6		0.981	0.108	1
06972	Zinc	7440-66-6	54.5		3.92	0.196	1
10146	Zirconium	7440-67-7	3.15	J	4.90	0.814	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.122	J	0.392	0.0981	2
06142	Silver	7440-22-4	0.0583	J	0.196	0.0196	2
06144	Strontium	7440-24-6	20.6		0.392	0.0333	2
06145	Thallium	7440-28-0	0.235		0.196	0.0294	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0445	JQ	0.984	0.0244	1
11031	12378-PeCDD	40321-76-4	0.374	JBQ	4.92	0.0331	1
11031	123478-HxCDD	39227-28-6	0.584	JB	4.92	0.0434	1
11031	123678-HxCDD	57653-85-7	1.74	J	4.92	0.0446	1
11031	123789-HxCDD	19408-74-3	1.56	JB	4.92	0.0405	1
11031	1234678-HpCDD	35822-46-9	40.1	B	4.92	0.0672	1
11031	OCDD	3268-87-9	892	B	9.84	0.0488	1
11031	2378-TCDF	51207-31-9	0.146	J	0.984	0.0315	1
11031	12378-PeCDF	57117-41-6	0.276	JB	4.92	0.0214	1
11031	23478-PeCDF	57117-31-4	0.250	JBQ	4.92	0.0206	1
11031	123478-HxCDF	70648-26-9	0.275	JB	4.92	0.0210	1
11031	123678-HxCDF	57117-44-9	0.186	JB	4.92	0.0206	1
11031	123789-HxCDF	72918-21-9	0.280	JB	4.92	0.0226	1
11031	234678-HxCDF	60851-34-5	0.214	JB	4.92	0.0210	1
11031	1234678-HpCDF	67562-39-4	3.79	JB	4.92	0.0179	1
11031	1234789-HpCDF	55673-89-7	0.269	JB	4.92	0.0236	1
11031	OCDF	39001-02-0	12.7	B	9.84	0.0258	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.22				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	86	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 15:20	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 23:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/25/2013 01:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:37	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:34	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:34	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:34	David K Beck	2
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:34	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 12:00	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-791-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093176
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 13:00 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL791 SDG#: PH056-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	0.68	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.85	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.5		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.70	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	7.5	J	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	93		18	6.0	1
12969	Phenanthrene	85-01-8	1.0	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.3	J	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	6.4		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	17		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		39.8	7.67	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.498	1
06935	Arsenic	7440-38-2	4.75		3.98	0.328	1
06946	Barium	7440-39-3	100		0.995	0.0328	1
06947	Beryllium	7440-41-7	0.599	J	0.995	0.0667	1
07914	Boron	7440-42-8	3.09	J	9.95	0.826	1
06949	Cadmium	7440-43-9	0.995	U	0.995	0.0328	1
01650	Calcium	7440-70-2	1,980		19.9	4.00	1
06951	Chromium	7440-47-3	18.2		2.99	0.0876	1
06952	Cobalt	7440-48-4	5.32		0.995	0.0896	1
06953	Copper	7440-50-8	9.62		1.99	0.179	1
01654	Iron	7439-89-6	19,900		39.8	3.78	1
06955	Lead	7439-92-1	7.66		2.99	0.468	1
01656	Lithium	7439-93-2	19.8		4.0	0.55	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,860		9.95	1.72	1
06958	Manganese	7439-96-5	327		0.995	0.0826	1
06960	Molybdenum	7439-98-7	0.540	J	1.99	0.169	1
06961	Nickel	7440-02-0	11.3		1.99	0.109	1
10145	Phosphorus	7723-14-0	323		9.95	0.508	1
01662	Potassium	7440-09-7	3,350		99.5	13.4	1
01667	Sodium	7440-23-5	68.9	J	99.5	16.6	1
06969	Tin	7440-31-5	2.72	J	9.95	0.219	1
06970	Titanium	7440-32-6	1,040		0.995	0.169	1
06971	Vanadium	7440-62-2	32.7		0.995	0.109	1
06972	Zinc	7440-66-6	51.8		3.98	0.199	1
10146	Zirconium	7440-67-7	2.19	J	4.98	0.826	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.157	J	0.398	0.0995	2
06142	Silver	7440-22-4	0.0251	J	0.199	0.0199	2
06144	Strontium	7440-24-6	18.6		0.398	0.0338	2
06145	Thallium	7440-28-0	0.257		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0111	J	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.65		0.0100	0.0100	1
	The pH was measured in water at 21.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0543	JQ	1.01	0.0304	1
11031	12378-PeCDD	40321-76-4	0.261	JBQ	5.04	0.0338	1
11031	123478-HxCDD	39227-28-6	0.404	JB	5.04	0.0421	1
11031	123678-HxCDD	57653-85-7	1.03	J	5.04	0.0453	1
11031	123789-HxCDD	19408-74-3	1.13	JBQ	5.04	0.0442	1
11031	1234678-HpCDD	35822-46-9	25.3	B	5.04	0.0656	1
11031	OCDD	3268-87-9	399	B	10.1	0.0439	1
11031	2378-TCDF	51207-31-9	0.0637	JQ	1.01	0.0293	1
11031	12378-PeCDF	57117-41-6	0.147	JB	5.04	0.0201	1
11031	23478-PeCDF	57117-31-4	0.0996	JBQ	5.04	0.0189	1
11031	123478-HxCDF	70648-26-9	0.222	JB	5.04	0.0240	1
11031	123678-HxCDF	57117-44-9	0.147	JB	5.04	0.0237	1
11031	123789-HxCDF	72918-21-9	0.222	JB	5.04	0.0270	1
11031	234678-HxCDF	60851-34-5	0.172	JB	5.04	0.0231	1
11031	1234678-HpCDF	67562-39-4	2.97	JB	5.04	0.0239	1
11031	1234789-HpCDF	55673-89-7	0.248	JB	5.04	0.0317	1
11031	OCDF	39001-02-0	9.56	JB	10.1	0.0302	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.632				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	92	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 15:51	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 00:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13172001	06/25/2013 02:13	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13172001	06/21/2013 14:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131670637001	06/18/2013 15:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131670637001B	06/19/2013 18:36	David K Beck	2
06142	Silver	SW-846 6020A	1	131670637001A	06/19/2013 18:36	David K Beck	2
06144	Strontium	SW-846 6020A	1	131670637001A	06/19/2013 18:36	David K Beck	2
06145	Thallium	SW-846 6020A	1	131670637001A	06/19/2013 18:36	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	131670638001	06/18/2013 12:02	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-775-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7093177
LLI Group # 1397198
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/13/2013 14:25 by JH

Submitted: 06/14/2013 09:25
Reported: 06/26/2013 22:13

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL775 SDG#: PH056-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131670637001	06/17/2013 23:57	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131670638001	06/18/2013 03:40	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13165039402A	06/14/2013 21:55	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13169162401B	06/18/2013 21:58	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13170SLD026	Sample number(s): 7093172-7093177									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	110		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	90		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	101		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	102		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	95		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	109		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	91		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	105		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Batch number: 131720002A	Sample number(s): 7093172-7093174									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	67	68	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	100		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131700023A	Sample number(s): 7093172-7093177									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	99		70-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	103		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	96		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131670637001	Sample number(s): 7093172-7093177									
Aluminum	40.0	U	40.0	7.71	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.500	mg/kg	100		80-120		
Arsenic	4.00	U	4.00	0.330	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	10.0	U	10.0	0.830	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0330	mg/kg	100		80-120		
Calcium	20.0	U	20.0	4.02	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.0880	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0900	mg/kg	101		80-120		
Copper	2.00	U	2.00	0.180	mg/kg	102		80-120		
Iron	40.0	U	40.0	3.80	mg/kg	102		80-120		
Lead	3.00	U	3.00	0.470	mg/kg	101		80-120		
Lithium	4.0	U	4.0	0.55	mg/kg	101		80-120		
Magnesium	10.0	U	10.0	1.73	mg/kg	100		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.110	mg/kg	103		80-120		
Phosphorus	1.25	J	10.0	0.510	mg/kg	103		80-120		
Potassium	100 U		100.	13.5	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	102		80-120		
Vanadium	1.00	U	1.00	0.110	mg/kg	104		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.830	mg/kg	102		80-120		
Batch number: 131670637001A	Sample number(s): 7093172-7093177									
Silver	0.200	U	0.200	0.0200	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0340	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	118		80-120		
Batch number: 131670637001B	Sample number(s): 7093172-7093177									
Selenium	0.400	U	0.400	0.100	mg/kg	114		80-120		
Batch number: 131670638001	Sample number(s): 7093172-7093177									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	98		85-120		
Batch number: 13165039402A	Sample number(s): 7093172-7093177									
15a pH by 9045D						100		95-105		
Batch number: 13169162401B	Sample number(s): 7093172-7093177									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13172001	Sample number(s): 7093172-7093177									
2378-TCDD	1.00	U	1.00	0.0279	ng/kg	95		67-158		
12378-PeCDD	0.0466	J	5.00	0.0278	ng/kg	97		70-142		
123478-HxCDD	0.0235	J	5.00	0.0182	ng/kg	104		70-164		
123678-HxCDD	5.00	U	5.00	0.0194	ng/kg	104		76-134		
123789-HxCDD	0.0485	J	5.00	0.0185	ng/kg	103		64-162		
1234678-HpCDD	0.0944	J	5.00	0.0201	ng/kg	101		70-140		
OCDD	0.287	J	10.0	0.0272	ng/kg	102		78-144		
2378-TCDF	1.00	U	1.00	0.0243	ng/kg	99		75-158		
12378-PeCDF	0.0665	J	5.00	0.0198	ng/kg	101		80-134		
23478-PeCDF	0.0271	J	5.00	0.0182	ng/kg	103		68-160		
123478-HxCDF	0.0475	J	5.00	0.0101	ng/kg	105		72-134		
123678-HxCDF	0.0263	J	5.00	0.00900	ng/kg	104		84-130		
123789-HxCDF	0.0606	J	5.00	0.0108	ng/kg	105		78-130		
234678-HxCDF	0.0280	J	5.00	0.00920	ng/kg	105		70-156		
1234678-HpCDF	0.0442	J	5.00	0.00680	ng/kg	104		82-122		
1234789-HpCDF	0.0170	J	5.00	0.00970	ng/kg	104		78-138		
OCDF	0.105	J	10.0	0.0295	ng/kg	102		63-170		
TEQ WHO 2005 - EDLx0.0	0.0132				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13170SLD026	Sample number(s): 7093172-7093177 UNSPK: P094789								
Acenaphthene	82	80	48-127	3	30				
Acenaphthylene	98	94	49-121	5	30				
Anthracene	89	85	52-126	5	30				
Benzo(a)anthracene	80	89	32-135	9	30				
Benzo(a)pyrene	75	81	36-138	7	30				
Benzo(b)fluoranthene	67	89	26-142	24	30				
Benzo(e)pyrene	76	79	70-130	4	30				
Benzo(g,h,i)perylene	58	60	33-141	3	30				
Benzo(k)fluoranthene	79	78	47-129	1	30				
Butylbenzylphthalate	109	103	59-153	5	30				
Di-n-butylphthalate	97	95	62-154	2	30				
Chrysene	75	84	29-148	11	30				
Dibenz(a,h)anthracene	71	71	34-125	1	30				
Diethylphthalate	100	96	76-127	3	30				
Dimethylphthalate	92	87	62-136	5	30				
Bis(2-Ethylhexyl)phthalate	89	85	39-167	4	30				
Fluoranthene	79	97	47-135	19	30				
Fluorene	85	81	50-129	4	30				
Indeno(1,2,3-cd)pyrene	66	68	17-136	3	30				
1-Methylnaphthalene	88	83	50-131	5	30				
2-Methylnaphthalene	87	82	28-144	5	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Naphthalene	85	81	31-148	5	30				
N-Nitrosodimethylamine	78	74	48-113	6	30				
Di-n-octylphthalate	109	106	52-162	3	30				
Phenanthrene	78	78	29-142	1	30				
Pyrene	77	94	26-143	18	30				
Batch number: 131720002A	Sample number(s): 7093172-7093174 UNSPK: P094789								
PCB-1016	100	100	16-146	0	50				
PCB-1260	106	103	40-134	3	50				
Batch number: 131700023A	Sample number(s): 7093172-7093177 UNSPK: P094789								
EFH (C12-C14)	90	92	49-123	3	20				
EFH (C15-C20)	147*	133*	49-123	10	20				
EFH (C21-C30)	582*	66	49-123	100*	20				
EFH (C30-C40)	264 (2)	139 (2)	49-123	20	20				
EFH (C8-C11)	73	76	49-123	5	20				
Batch number: 131670637001	Sample number(s): 7093172-7093177 UNSPK: P088258 BKG: P088258								
Aluminum	1829 (2)	1645 (2)	75-125	2	20	17,100	17,400	2	20
Antimony	66*	64*	75-125	3	20	0.685 J	0.621 J	10 (1)	20
Arsenic	93	90	75-125	1	20	6.46	6.04	7 (1)	20
Barium	96	97	75-125	1	20	54.3	52.3	4	20
Beryllium	100	100	75-125	0	20	0.667 J	0.669 J	0 (1)	20
Boron	94	95	75-125	1	20	2.35 J	2.03 J	15 (1)	20
Cadmium	81	82	75-125	2	20	0.971 U	0.971 U	0 (1)	20
Calcium	124	130*	75-125	1	20	1,510	1,510	0	20
Chromium	104	102	75-125	1	20	19.7	19.5	1	20
Cobalt	92	92	75-125	0	20	3.07	2.98	3 (1)	20
Copper	100	100	75-125	0	20	8.07	8.10	0 (1)	20
Iron	3374 (2)	-244 (2)	75-125	15	20	21,800	22,100	1	20
Lead	93	87	75-125	5	20	5.96	5.77	3 (1)	20
Lithium	99	98	75-125	0	20	21.4	22.2	4	20
Magnesium	241 (2)	165 (2)	75-125	3	20	4,250	4,320	2	20
Manganese	117	99	75-125	5	20	121	125	3	20
Molybdenum	91	91	75-125	0	20	0.316 J	0.225 J	33* (1)	20
Nickel	93	93	75-125	0	20	8.20	8.25	1 (1)	20
Phosphorus	103	86	75-125	8	20	107	100	6	20
Potassium	139*	130*	75-125	3	20	1,420	1,470	4	20
Sodium	98	94	75-125	2	20	834	842	1	20
Tin	86	86	75-125	0	20	2.91 J	2.88 J	1 (1)	20
Titanium	262 (2)	267 (2)	75-125	0	20	1,010	1,030	2	20
Vanadium	113	103	75-125	6	20	35.2	34.9	1	20
Zinc	100	97	75-125	2	20	39.0	39.5	1	20
Zirconium	98	97	75-125	1	20	2.92 J	2.89 J	1 (1)	20
Batch number: 131670637001A	Sample number(s): 7093172-7093177 UNSPK: P088258 BKG: P088258								
Silver	101	101	75-125	0	20	0.0297 J	0.0286 J	4 (1)	20
Strontium	93	88	75-125	2	20	17.5	16.0	9	20
Thallium	86	89	75-125	3	20	0.245	0.233	5 (1)	20

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131670637001B	Sample number(s): 7093172-7093177 UNSPK: P088258 BKG: P088258								
Selenium	99	93	75-125	7	20	0.388 U	0.388 U	0 (1)	20
Batch number: 131670638001	Sample number(s): 7093172-7093177 UNSPK: P088258 BKG: P088258								
3a Mercury 7471A	108	109	65-135	2	20	0.0165 U	0.0137 J	200* (1)	20
Batch number: 13165039402A	Sample number(s): 7093172-7093177 BKG: 7093172								
15a pH by 9045D						6.55	6.57	0	3
Batch number: 13169162401B	Sample number(s): 7093172-7093177 BKG: P091441								
14a Moisture Content by 160.3						8.3	8.1	3	20
Batch number: 13172001	Sample number(s): 7093172-7093177 UNSPK: P091676								
2378-TCDD	93	90	40-135	1	20				
12378-PeCDD	97	96	40-135	2	20				
123478-HxCDD	103	101	40-135	0	20				
123678-HxCDD	98	97	40-135	2	20				
123789-HxCDD	99	97	40-135	2	20				
1234678-HpCDD	3*	-9*	40-135	6	20				
OCDD	-651 (2)	-731 (2)	40-135	11	20				
2378-TCDF	99	101	40-135	4	20				
12378-PeCDF	102	104	40-135	5	20				
23478-PeCDF	105	104	40-135	2	20				
123478-HxCDF	106	104	40-135	1	20				
123678-HxCDF	103	101	40-135	1	20				
123789-HxCDF	105	105	40-135	2	20				
234678-HxCDF	104	103	40-135	3	20				
1234678-HpCDF	91	96	40-135	6	20				
1234789-HpCDF	103	103	40-135	3	20				
OCDF	84	85	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13170SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7093172	70	80	85
7093173	61	64	74
7093174	67	72	79
7093175	62	64	74
7093176	70	77	82
7093177	62	68	72
Blank	81	88	95

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Surrogate Quality Control

LCS	84	92	97
MS	76	81	86
MSD	70	75	79
Limits:	54-129	61-134	55-129

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131720002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7093172	115	116
7093173	142*	131*
7093174	115	109
Blank	112	117
LCS	111	120
LCSD	113	114
MS	112	123*
MSD	113	111
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131700023A

	Chlorobenzene	Orthoterphenyl
7093172	89	89
7093173	82	84
7093174	91	89
7093175	87	91
7093176	80	82
7093177	85	87
Blank	96	95
LCS	97	102
MS	83	69
MSD	91	94
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13172001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7093172	80	88	96	101	98	101
7093173	74	81	86	86	85	91
7093174	71	76	83	86	85	92
7093175	66	69	83	84	81	80
7093176	74	78	86	89	88	93
7093177	69	76	83	88	85	87
Blank	65	72	82	85	83	84
MS	75	81	86	89	88	95
MSD	73	80	86	89	87	94
OPR	62	72	78	81	79	81
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397198
Reported: 06/26/13 at 10:13 PM

Surrogate Quality Control

7093172	121	99	103	86	90	92
7093173	97	91	95	80	79	80
7093174	101	92	100	74	76	82
7093175	91	77	78	67	74	78
7093176	102	90	92	77	80	82
7093177	99	87	92	73	78	81
Blank	100	81	83	71	77	78
MS	103	92	98	79	81	83
MSD	100	93	100	78	81	83
OPR	97	81	83	74	74	75
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7093172	90	99	106	76	88
7093173	79	86	95	73	80
7093174	78	89	108	69	76
7093175	75	76	79	65	69
7093176	80	87	93	71	78
7093177	77	84	92	67	75
Blank	77	83	85	64	72
MS	81	89	98	71	81
MSD	81	89	98	68	77
OPR	75	81	86	58	72
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

acct# 13013 Cap# 1397198 Sample# 7093172-77

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/13/2013
CarrierName: FedEx
AirbillNo: 799998470613

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130613-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-792-SA5A-SB-0.0-0.5	6/13/13 10:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-792-SA5A-SB-0.0-0.5	6/13/13 10:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-793-SA5A-SB-0.0-0.5	6/13/13 11:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-793-SA5A-SB-0.0-0.5	6/13/13 11:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-795-SA5A-SB-0.0-0.5	6/13/13 09:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-795-SA5A-SB-0.0-0.5	6/13/13 09:20	SO	None	1 - 4 oz glass	10 day													X																		
SL-790-SA5A-SB-0.0-0.5	6/13/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-790-SA5A-SB-0.0-0.5	6/13/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-791-SA5A-SB-0.0-0.5	6/13/13 13:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-791-SA5A-SB-0.0-0.5	6/13/13 13:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-775-SA5A-SB-0.0-0.5	6/13/13 14:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-775-SA5A-SB-0.0-0.5	6/13/13 14:25	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: John Halbert

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shaff Mysel	06/13/2013	1600									
									Patsy	6/14/2013	0925

COC Rev 2

COC 20130613-01, Page 1 of 1

eurofins | Lancaster Laboratories

C# 1397198

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 6/14/13

Time of Receipt: 0925

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/14/13 1100

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

June 27, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/15/2013
Group Number: 1397462
SDG: PH057
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-850-SA5A-SB-0.0-0.5 Soil	7094786
SL-869-SA5A-SB-0.0-0.5 Soil	7094787
SL-870-SA5A-SB-0.0-0.5 Soil	7094788
SL-852-SA5A-SB-0.0-0.5 Soil	7094789
SL-852-SA5A-SB-0.0-0.5MS Soil	7094790
SL-852-SA5A-SB-0.0-0.5MSD Soil	7094791
SL-852-SA5A-SB-0.0-0.5DUP Soil	7094792
SL-1252-SA5A-SB-0.0-0.5 Soil	7094793
SL-852-SA5A-SB-4.5-5.5 Soil	7094794
TB-061413 Water	7094795

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.9	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	8.9	J	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,000		39.5	7.12	1
06944	Antimony	7440-36-0	3.95	U	3.95	0.731	1
06935	Arsenic	7440-38-2	2.68	J	3.95	0.691	1
06946	Barium	7440-39-3	96.5		0.988	0.0326	1
06947	Beryllium	7440-41-7	0.648	J	0.988	0.0662	1
07914	Boron	7440-42-8	4.22	J	9.88	0.830	1
06949	Cadmium	7440-43-9	0.988	U	0.988	0.0751	1
01650	Calcium	7440-70-2	2,180		19.8	3.30	1
06951	Chromium	7440-47-3	23.0		2.96	0.158	1
06952	Cobalt	7440-48-4	5.52		0.988	0.0978	1
06953	Copper	7440-50-8	8.80		1.98	0.286	1
01654	Iron	7439-89-6	21,000		39.5	3.58	1
06955	Lead	7439-92-1	6.55		2.96	0.494	1
01656	Lithium	7439-93-2	22.5		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,280		9.88	1.65	1
06958	Manganese	7439-96-5	310		0.988	0.0820	1
06960	Molybdenum	7439-98-7	0.513	J	1.98	0.168	1
06961	Nickel	7440-02-0	12.8		1.98	0.128	1
10145	Phosphorus	7723-14-0	230		9.88	2.85	1
01662	Potassium	7440-09-7	2,460		98.8	8.24	1
01667	Sodium	7440-23-5	156		98.8	16.5	1
06969	Tin	7440-31-5	2.47	J	9.88	0.217	1
06970	Titanium	7440-32-6	1,190		0.988	0.168	1
06971	Vanadium	7440-62-2	39.2		0.988	0.128	1
06972	Zinc	7440-66-6	52.6		3.95	0.198	1
10146	Zirconium	7440-67-7	1.70	J	4.94	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.134	J	0.395	0.0988	2
06142	Silver	7440-22-4	0.0417	J	0.198	0.0257	2
06144	Strontium	7440-24-6	25.9		0.395	0.0514	2
06145	Thallium	7440-28-0	0.303		0.198	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.73		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0369	1
11031	12378-PeCDD	40321-76-4	0.0798	JBQ	5.02	0.0505	1
11031	123478-HxCDD	39227-28-6	0.152	JBQ	5.02	0.0487	1
11031	123678-HxCDD	57653-85-7	0.296	JB	5.02	0.0502	1
11031	123789-HxCDD	19408-74-3	0.365	JB	5.02	0.0468	1
11031	1234678-HpCDD	35822-46-9	6.93	B	5.02	0.0493	1
11031	OCDD	3268-87-9	89.8	B	10.0	0.0532	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0327	1
11031	12378-PeCDF	57117-41-6	0.0846	JBQ	5.02	0.0308	1
11031	23478-PeCDF	57117-31-4	0.0683	JBQ	5.02	0.0294	1
11031	123478-HxCDF	70648-26-9	0.0916	JB	5.02	0.0276	1
11031	123678-HxCDF	57117-44-9	0.130	JB	5.02	0.0249	1
11031	123789-HxCDF	72918-21-9	0.141	JBQ	5.02	0.0310	1
11031	234678-HxCDF	60851-34-5	0.0875	JB	5.02	0.0249	1
11031	1234678-HpCDF	67562-39-4	1.63	JB	5.02	0.0342	1
11031	1234789-HpCDF	55673-89-7	0.190	JB	5.02	0.0449	1
11031	OCDF	39001-02-0	7.65	JB	10.0	0.0504	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.214				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 16:23	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 21:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 14:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:19	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:05	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:05	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:05	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:05	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 11:48	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-850-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094786
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:05 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL850 SDG#: PH057-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	0.70	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J	18	6.0	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	58		18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	14		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		39.8	7.17	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.736	1
06935	Arsenic	7440-38-2	2.96	J	3.98	0.696	1
06946	Barium	7440-39-3	95.9		0.995	0.0328	1
06947	Beryllium	7440-41-7	0.581	J	0.995	0.0666	1
07914	Boron	7440-42-8	3.62	J	9.95	0.836	1
06949	Cadmium	7440-43-9	0.995	U	0.995	0.0756	1
01650	Calcium	7440-70-2	2,090		19.9	3.32	1
06951	Chromium	7440-47-3	24.3		2.98	0.159	1
06952	Cobalt	7440-48-4	5.91		0.995	0.0985	1
06953	Copper	7440-50-8	11.5		1.99	0.288	1
01654	Iron	7439-89-6	22,500		39.8	3.60	1
06955	Lead	7439-92-1	6.68		2.98	0.497	1
01656	Lithium	7439-93-2	24.5		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,750		9.95	1.66	1
06958	Manganese	7439-96-5	300		0.995	0.0826	1
06960	Molybdenum	7439-98-7	0.492	J	1.99	0.169	1
06961	Nickel	7440-02-0	15.1		1.99	0.129	1
10145	Phosphorus	7723-14-0	394		9.95	2.87	1
01662	Potassium	7440-09-7	3,660		99.5	8.30	1
01667	Sodium	7440-23-5	80.5	J	99.5	16.6	1
06969	Tin	7440-31-5	2.53	J	9.95	0.219	1
06970	Titanium	7440-32-6	1,210		0.995	0.169	1
06971	Vanadium	7440-62-2	38.8		0.995	0.129	1
06972	Zinc	7440-66-6	60.1		3.98	0.199	1
10146	Zirconium	7440-67-7	1.40	J	4.97	0.836	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.147	J	0.398	0.0995	2
06142	Silver	7440-22-4	0.0361	J	0.199	0.0259	2
06144	Strontium	7440-24-6	20.8		0.398	0.0517	2
06145	Thallium	7440-28-0	0.362		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184		0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.08		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.989 U	0.989	0.0328	1
11031	12378-PeCDD	40321-76-4	0.0618 JBQ	4.94	0.0464	1
11031	123478-HxCDD	39227-28-6	0.0382 JB	4.94	0.0379	1
11031	123678-HxCDD	57653-85-7	0.148 JBQ	4.94	0.0397	1
11031	123789-HxCDD	19408-74-3	0.224 JBQ	4.94	0.0364	1
11031	1234678-HpCDD	35822-46-9	0.356 JBQ	4.94	0.0379	1
11031	OCDD	3268-87-9	4.42 JB	9.89	0.0472	1
11031	2378-TCDF	51207-31-9	0.989 U	0.989	0.0288	1
11031	12378-PeCDF	57117-41-6	0.0957 JBQ	4.94	0.0281	1
11031	23478-PeCDF	57117-31-4	4.94 U	4.94	0.0273	1
11031	123478-HxCDF	70648-26-9	4.94 U	4.94	0.0158	1
11031	123678-HxCDF	57117-44-9	0.0523 JBQ	4.94	0.0153	1
11031	123789-HxCDF	72918-21-9	0.207 JBQ	4.94	0.0174	1
11031	234678-HxCDF	60851-34-5	0.0494 JBQ	4.94	0.0139	1
11031	1234678-HpCDF	67562-39-4	0.102 JB	4.94	0.0117	1
11031	1234789-HpCDF	55673-89-7	0.0313 JBQ	4.94	0.0168	1
11031	OCDF	39001-02-0	0.167 JBQ	9.89	0.0445	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00615			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 16:54	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 00:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 15:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:24	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:15	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:15	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:15	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:15	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 11:50	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-869-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094787
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 09:55 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL869 SDG#: PH057-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	0.74	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	J	18	6.0	1
12969	Fluoranthene	206-44-0	0.78	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	16	J	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	34		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		39.5	7.13	1
06944	Antimony	7440-36-0	3.95	U	3.95	0.732	1
06935	Arsenic	7440-38-2	2.20	J	3.95	0.692	1
06946	Barium	7440-39-3	93.4		0.989	0.0326	1
06947	Beryllium	7440-41-7	0.501	J	0.989	0.0662	1
07914	Boron	7440-42-8	3.86	J	9.89	0.830	1
06949	Cadmium	7440-43-9	0.989	U	0.989	0.0751	1
01650	Calcium	7440-70-2	2,200		19.8	3.30	1
06951	Chromium	7440-47-3	19.9		2.97	0.158	1
06952	Cobalt	7440-48-4	4.73		0.989	0.0979	1
06953	Copper	7440-50-8	9.33		1.98	0.287	1
01654	Iron	7439-89-6	19,400		39.5	3.58	1
06955	Lead	7439-92-1	8.41		2.97	0.494	1
01656	Lithium	7439-93-2	21.6		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,110		9.89	1.65	1
06958	Manganese	7439-96-5	306		0.989	0.0821	1
06960	Molybdenum	7439-98-7	0.448	J	1.98	0.168	1
06961	Nickel	7440-02-0	11.5		1.98	0.129	1
10145	Phosphorus	7723-14-0	396		9.89	2.86	1
01662	Potassium	7440-09-7	3,770		98.9	8.25	1
01667	Sodium	7440-23-5	81.5	J	98.9	16.5	1
06969	Tin	7440-31-5	2.41	J	9.89	0.218	1
06970	Titanium	7440-32-6	1,170		0.989	0.168	1
06971	Vanadium	7440-62-2	33.3		0.989	0.129	1
06972	Zinc	7440-66-6	57.3		3.95	0.198	1
10146	Zirconium	7440-67-7	0.901	J	4.94	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.154	J	0.395	0.0989	2
06142	Silver	7440-22-4	0.0600	J	0.198	0.0257	2
06144	Strontium	7440-24-6	20.9		0.395	0.0514	2
06145	Thallium	7440-28-0	0.282		0.198	0.0297	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.39		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0331	1
11031	12378-PeCDD	40321-76-4	0.170	JBQ	5.08	0.0522	1
11031	123478-HxCDD	39227-28-6	5.08	U	5.08	0.0571	1
11031	123678-HxCDD	57653-85-7	0.568	JB	5.08	0.0603	1
11031	123789-HxCDD	19408-74-3	0.653	JB	5.08	0.0603	1
11031	1234678-HpCDD	35822-46-9	7.45	B	5.08	0.0558	1
11031	OCDD	3268-87-9	101	B	10.2	0.0543	1
11031	2378-TCDF	51207-31-9	0.0604	JBQ	1.02	0.0372	1
11031	12378-PeCDF	57117-41-6	0.248	JB	5.08	0.0323	1
11031	23478-PeCDF	57117-31-4	0.160	JBQ	5.08	0.0324	1
11031	123478-HxCDF	70648-26-9	0.102	JB	5.08	0.0301	1
11031	123678-HxCDF	57117-44-9	0.179	JB	5.08	0.0277	1
11031	123789-HxCDF	72918-21-9	0.253	JB	5.08	0.0345	1
11031	234678-HxCDF	60851-34-5	0.169	JB	5.08	0.0280	1
11031	1234678-HpCDF	67562-39-4	1.52	JB	5.08	0.0264	1
11031	1234789-HpCDF	55673-89-7	0.165	JB	5.08	0.0370	1
11031	OCDF	39001-02-0	5.52	JB	10.2	0.0500	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.323				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 17:26	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 00:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 16:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:35	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:17	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:17	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:17	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:17	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 11:52	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-870-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094788
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 10:40 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL870 SDG#: PH057-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.2	J	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	3.4		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.72	J	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	1.0	J	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	5.9	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	5.9	1
12969	Chrysene	218-01-9	2.4		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	5.9	1
12969	Dimethylphthalate	131-11-3	18	U	18	5.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.1	J	18	5.9	1
12969	Fluoranthene	206-44-0	3.1		1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	J	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	5.9	1
12969	Phenanthrene	85-01-8	1.8		1.7	0.66	1
12969	Pyrene	129-00-0	2.6		1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	8.1		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	22		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	1.99	J	3.99	0.698	1
06946	Barium	7440-39-3	89.2		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.487	J	0.997	0.0668	1
07914	Boron	7440-42-8	4.14	J	9.97	0.837	1
06949	Cadmium	7440-43-9	0.997	U	0.997	0.0758	1
01650	Calcium	7440-70-2	2,240		19.9	3.33	1
06951	Chromium	7440-47-3	19.0		2.99	0.159	1
06952	Cobalt	7440-48-4	4.41		0.997	0.0987	1
06953	Copper	7440-50-8	9.27		1.99	0.289	1
01654	Iron	7439-89-6	18,000		39.9	3.61	1
06955	Lead	7439-92-1	7.29		2.99	0.498	1
01656	Lithium	7439-93-2	19.6		4.0	0.34	1
01657	Magnesium	7439-95-4	3,800		9.97	1.66	1
06958	Manganese	7439-96-5	275		0.997	0.0827	1
06960	Molybdenum	7439-98-7	0.782	J	1.99	0.169	1
06961	Nickel	7440-02-0	11.1		1.99	0.130	1
10145	Phosphorus	7723-14-0	337		9.97	2.88	1
01662	Potassium	7440-09-7	3,510		99.7	8.31	1
01667	Sodium	7440-23-5	75.7	J	99.7	16.6	1
06969	Tin	7440-31-5	2.35	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,100		0.997	0.169	1
06971	Vanadium	7440-62-2	31.2		0.997	0.130	1
06972	Zinc	7440-66-6	49.7		3.99	0.199	1
10146	Zirconium	7440-67-7	1.42	J	4.98	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.164	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.0583	J	0.199	0.0259	2
06144	Strontium	7440-24-6	25.3		0.399	0.0518	2
06145	Thallium	7440-28-0	0.337		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.20		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.67		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.998	U	0.998	0.0303	1
11031	12378-PeCDD	40321-76-4	0.123	JBQ	4.99	0.0512	1
11031	123478-HxCDD	39227-28-6	0.141	JBQ	4.99	0.0472	1
11031	123678-HxCDD	57653-85-7	0.539	JB	4.99	0.0515	1
11031	123789-HxCDD	19408-74-3	0.581	JB	4.99	0.0497	1
11031	1234678-HpCDD	35822-46-9	8.64	B	4.99	0.0453	1
11031	OCDD	3268-87-9	131	B	9.98	0.0425	1
11031	2378-TCDF	51207-31-9	0.137	JB	0.998	0.0471	1
11031	12378-PeCDF	57117-41-6	0.355	JBQ	4.99	0.0315	1
11031	23478-PeCDF	57117-31-4	0.209	JBQ	4.99	0.0306	1
11031	123478-HxCDF	70648-26-9	0.105	JBQ	4.99	0.0297	1
11031	123678-HxCDF	57117-44-9	0.117	JBQ	4.99	0.0282	1
11031	123789-HxCDF	72918-21-9	0.260	JBQ	4.99	0.0317	1
11031	234678-HxCDF	60851-34-5	0.144	JBQ	4.99	0.0277	1
11031	1234678-HpCDF	67562-39-4	1.25	JB	4.99	0.0168	1
11031	1234789-HpCDF	55673-89-7	0.121	JB	4.99	0.0242	1
11031	OCDF	39001-02-0	3.64	JB	9.98	0.0377	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.266				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 17:58	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/22/2013 16:22	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 01:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 17:17	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 11:55	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 10:51	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 10:51	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 10:51	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094789
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 10:51	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 11:54	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094790
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	27		1.7	0.66	1
12969	Acenaphthylene	208-96-8	32		1.7	0.33	1
12969	Anthracene	120-12-7	29		1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	28		1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	26		1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	26		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	25		17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	20		1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	27		1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	36		18	5.9	1
12969	Di-n-butylphthalate	84-74-2	32		18	5.9	1
12969	Chrysene	218-01-9	27		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	23		1.7	0.66	1
12969	Diethylphthalate	84-66-2	33		18	5.9	1
12969	Dimethylphthalate	131-11-3	30		18	5.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	37		18	5.9	1
12969	Fluoranthene	206-44-0	29		1.7	0.66	1
12969	Fluorene	86-73-7	28		1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	22		1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	29		1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	29		1.7	0.66	1
12969	Naphthalene	91-20-3	28		1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	26		1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	36		18	5.9	1
12969	Phenanthrene	85-01-8	28		1.7	0.66	1
12969	Pyrene	129-00-0	28		1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	170		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	180		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1

For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	3.7	J	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	33		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	35		10	4.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094790
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		39.9	7.19	1
06944	Antimony	7440-36-0	25.3		3.99	0.738	1
06935	Arsenic	7440-38-2	14.5		3.99	0.698	1
06946	Barium	7440-39-3	268		0.997	0.0329	1
06947	Beryllium	7440-41-7	4.92		0.997	0.0668	1
07914	Boron	7440-42-8	172		9.97	0.837	1
06949	Cadmium	7440-43-9	3.80		0.997	0.0758	1
01650	Calcium	7440-70-2	2,680		19.9	3.33	1
06951	Chromium	7440-47-3	38.0		2.99	0.159	1
06952	Cobalt	7440-48-4	44.5		0.997	0.0987	1
06953	Copper	7440-50-8	31.0		1.99	0.289	1
01654	Iron	7439-89-6	17,800		39.9	3.61	1
06955	Lead	7439-92-1	20.4		2.99	0.498	1
01656	Lithium	7439-93-2	103		4.0	0.34	1
01657	Magnesium	7439-95-4	3,980		9.97	1.66	1
06958	Manganese	7439-96-5	333		0.997	0.0827	1
06960	Molybdenum	7439-98-7	160		1.99	0.169	1
06961	Nickel	7440-02-0	52.0		1.99	0.130	1
10145	Phosphorus	7723-14-0	426		9.97	2.88	1
01662	Potassium	7440-09-7	4,520		99.7	8.31	1
01667	Sodium	7440-23-5	902		99.7	16.6	1
06969	Tin	7440-31-5	305		9.97	0.219	1
06970	Titanium	7440-32-6	1,370		0.997	0.169	1
06971	Vanadium	7440-62-2	79.4		0.997	0.130	1
06972	Zinc	7440-66-6	93.1		3.99	0.199	1
10146	Zirconium	7440-67-7	78.0		4.98	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.26		0.399	0.0997	2
06142	Silver	7440-22-4	11.1		0.199	0.0259	2
06144	Strontium	7440-24-6	34.4		0.399	0.0518	2
06145	Thallium	7440-28-0	0.740		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.164		0.0160	0.0096	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.67		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094790
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.9	B	1.00	0.0788	1
11031	12378-PeCDD	40321-76-4	96.0	B	5.02	0.126	1
11031	123478-HxCDD	39227-28-6	97.3	B	5.02	0.0794	1
11031	123678-HxCDD	57653-85-7	96.1	B	5.02	0.0852	1
11031	123789-HxCDD	19408-74-3	95.1	B	5.02	0.0797	1
11031	1234678-HpCDD	35822-46-9	225	B	5.02	0.112	1
11031	OCDD	3268-87-9	782	B	10.0	0.0952	1
11031	2378-TCDF	51207-31-9	18.7	B	1.00	0.0783	1
11031	12378-PeCDF	57117-41-6	90.6	B	5.02	0.0595	1
11031	23478-PeCDF	57117-31-4	92.4	B	5.02	0.0573	1
11031	123478-HxCDF	70648-26-9	90.8	B	5.02	0.0776	1
11031	123678-HxCDF	57117-44-9	89.9	B	5.02	0.0709	1
11031	123789-HxCDF	72918-21-9	88.2	B	5.02	0.0877	1
11031	234678-HxCDF	60851-34-5	90.7	B	5.02	0.0658	1
11031	1234678-HpCDF	67562-39-4	90.7	B	5.02	0.0464	1
11031	1234789-HpCDF	55673-89-7	86.9	B	5.02	0.0679	1
11031	OCDF	39001-02-0	175	B	10.0	0.0639	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094790
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 18:30	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/22/2013 16:40	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 01:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 18:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:07	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 10:58	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 10:58	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 10:58	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094790
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 10:58	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094791
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	26		1.7	0.66	1
12969	Acenaphthylene	208-96-8	31		1.7	0.33	1
12969	Anthracene	120-12-7	28		1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	30		1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	28		1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	33		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	26		17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	20		1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	27		1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	34		18	5.9	1
12969	Di-n-butylphthalate	84-74-2	31		18	5.9	1
12969	Chrysene	218-01-9	30		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	23		1.7	0.66	1
12969	Diethylphthalate	84-66-2	32		18	5.9	1
12969	Dimethylphthalate	131-11-3	29		18	5.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	35		18	5.9	1
12969	Fluoranthene	206-44-0	35		1.7	0.66	1
12969	Fluorene	86-73-7	27		1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	23		1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	28		1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	27		1.7	0.66	1
12969	Naphthalene	91-20-3	27		1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	24		1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	35		18	5.9	1
12969	Phenanthrene	85-01-8	27		1.7	0.66	1
12969	Pyrene	129-00-0	34		1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	170		17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	170		17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	3.4	J	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	29		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094791
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,500	39.9	7.19	1
06944	Antimony	7440-36-0	21.2	3.99	0.738	1
06935	Arsenic	7440-38-2	13.1	3.99	0.698	1
06946	Barium	7440-39-3	219	0.997	0.0329	1
06947	Beryllium	7440-41-7	4.24	0.997	0.0668	1
07914	Boron	7440-42-8	148	9.97	0.837	1
06949	Cadmium	7440-43-9	3.50	0.997	0.0758	1
01650	Calcium	7440-70-2	2,110	19.9	3.33	1
06951	Chromium	7440-47-3	32.6	2.99	0.159	1
06952	Cobalt	7440-48-4	39.3	0.997	0.0987	1
06953	Copper	7440-50-8	25.9	1.99	0.289	1
01654	Iron	7439-89-6	13,400	39.9	3.61	1
06955	Lead	7439-92-1	18.4	2.99	0.498	1
01656	Lithium	7439-93-2	78.5	4.0	0.34	1
01657	Magnesium	7439-95-4	3,010	9.97	1.66	1
06958	Manganese	7439-96-5	284	0.997	0.0827	1
06960	Molybdenum	7439-98-7	140	1.99	0.169	1
06961	Nickel	7440-02-0	45.7	1.99	0.130	1
10145	Phosphorus	7723-14-0	365	9.97	2.88	1
01662	Potassium	7440-09-7	3,440	99.7	8.31	1
01667	Sodium	7440-23-5	689	99.7	16.6	1
06969	Tin	7440-31-5	268	9.97	0.219	1
06970	Titanium	7440-32-6	1,180	0.997	0.169	1
06971	Vanadium	7440-62-2	67.3	0.997	0.130	1
06972	Zinc	7440-66-6	81.2	3.99	0.199	1
10146	Zirconium	7440-67-7	60.8	4.98	0.837	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.52	0.399	0.0997	2
06142	Silver	7440-22-4	13.0	0.199	0.0259	2
06144	Strontium	7440-24-6	39.1	0.399	0.0518	2
06145	Thallium	7440-28-0	0.798	0.199	0.0299	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.171	0.0164	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.67	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094791
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.2	B	0.979	0.0463	1
11031	12378-PeCDD	40321-76-4	92.2	B	4.90	0.0669	1
11031	123478-HxCDD	39227-28-6	88.9	B	4.90	0.0700	1
11031	123678-HxCDD	57653-85-7	91.0	B	4.90	0.0747	1
11031	123789-HxCDD	19408-74-3	88.8	B	4.90	0.0724	1
11031	1234678-HpCDD	35822-46-9	98.0	B	4.90	0.0779	1
11031	OCDD	3268-87-9	368	B	9.79	0.0685	1
11031	2378-TCDF	51207-31-9	18.1	B	0.979	0.0763	1
11031	12378-PeCDF	57117-41-6	87.8	B	4.90	0.0535	1
11031	23478-PeCDF	57117-31-4	88.6	B	4.90	0.0513	1
11031	123478-HxCDF	70648-26-9	85.5	B	4.90	0.0681	1
11031	123678-HxCDF	57117-44-9	86.9	B	4.90	0.0652	1
11031	123789-HxCDF	72918-21-9	85.8	B	4.90	0.0759	1
11031	234678-HxCDF	60851-34-5	86.9	B	4.90	0.0588	1
11031	1234678-HpCDF	67562-39-4	87.6	B	4.90	0.0444	1
11031	1234789-HpCDF	55673-89-7	85.6	B	4.90	0.0688	1
11031	OCDF	39001-02-0	173	B	9.79	0.0622	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094791
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 19:01	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/22/2013 16:59	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 01:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 19:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:11	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:01	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:01	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:01	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094791
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:01	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094792
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,100		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	2.14	J	3.99	0.698	1
06946	Barium	7440-39-3	80.8		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.466	J	0.997	0.0668	1
07914	Boron	7440-42-8	3.96	J	9.97	0.837	1
06949	Cadmium	7440-43-9	0.997	U	0.997	0.0758	1
01650	Calcium	7440-70-2	2,030		19.9	3.33	1
06951	Chromium	7440-47-3	17.8		2.99	0.159	1
06952	Cobalt	7440-48-4	3.91		0.997	0.0987	1
06953	Copper	7440-50-8	8.96		1.99	0.289	1
01654	Iron	7439-89-6	17,500		39.9	3.61	1
06955	Lead	7439-92-1	6.49		2.99	0.498	1
01656	Lithium	7439-93-2	18.3		4.0	0.34	1
01657	Magnesium	7439-95-4	3,580		9.97	1.66	1
06958	Manganese	7439-96-5	272		0.997	0.0827	1
06960	Molybdenum	7439-98-7	0.425	J	1.99	0.169	1
06961	Nickel	7440-02-0	9.55		1.99	0.130	1
10145	Phosphorus	7723-14-0	298		9.97	2.88	1
01662	Potassium	7440-09-7	3,280		99.7	8.31	1
01667	Sodium	7440-23-5	67.6	J	99.7	16.6	1
06969	Tin	7440-31-5	1.82	J	9.97	0.219	1
06970	Titanium	7440-32-6	984		0.997	0.169	1
06971	Vanadium	7440-62-2	29.5		0.997	0.130	1
06972	Zinc	7440-66-6	43.1		3.99	0.199	1
10146	Zirconium	7440-67-7	2.04	J	4.98	0.837	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.177	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.0457	J	0.199	0.0259	2
06144	Strontium	7440-24-6	25.1		0.399	0.0518	2
06145	Thallium	7440-28-0	0.314		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.18		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	0.67		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	0.64		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094792
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 12:50 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL852 SDG#: PH057-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:03	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 10:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 10:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 10:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 10:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 11:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.66	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.66	1
12969	Benzo(a)pyrene	50-32-8	0.78	J	1.7	0.66	1
12969	Benzo(b)fluoranthene	205-99-2	2.4		1.7	0.66	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.66	1
12969	Benzo(k)fluoranthene	207-08-9	0.74	J	1.7	0.66	1
12969	Butylbenzylphthalate	85-68-7	6.2	J	18	5.9	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	5.9	1
12969	Chrysene	218-01-9	1.0	J	1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.66	1
12969	Diethylphthalate	84-66-2	18	U	18	5.9	1
12969	Dimethylphthalate	131-11-3	18	U	18	5.9	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	18	5.9	1
12969	Fluoranthene	206-44-0	1.2	J	1.7	0.66	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.66	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.66	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.66	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.66	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.66	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.66	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	5.9	1
12969	Phenanthrene	85-01-8	0.67	J	1.7	0.66	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.66	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	7.6		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	21		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		38.7	6.98	1
06944	Antimony	7440-36-0	3.87	U	3.87	0.717	1
06935	Arsenic	7440-38-2	2.86	J	3.87	0.678	1
06946	Barium	7440-39-3	107		0.969	0.0320	1
06947	Beryllium	7440-41-7	0.591	J	0.969	0.0649	1
07914	Boron	7440-42-8	4.03	J	9.69	0.814	1
06949	Cadmium	7440-43-9	0.969	U	0.969	0.0736	1
01650	Calcium	7440-70-2	2,560		19.4	3.24	1
06951	Chromium	7440-47-3	22.4		2.91	0.155	1
06952	Cobalt	7440-48-4	5.64		0.969	0.0959	1
06953	Copper	7440-50-8	11.0		1.94	0.281	1
01654	Iron	7439-89-6	21,800		38.7	3.51	1
06955	Lead	7439-92-1	8.94		2.91	0.484	1
01656	Lithium	7439-93-2	21.8		3.9	0.33	1
01657	Magnesium	7439-95-4	4,390		9.69	1.62	1
06958	Manganese	7439-96-5	337		0.969	0.0804	1
06960	Molybdenum	7439-98-7	0.454	J	1.94	0.165	1
06961	Nickel	7440-02-0	13.4		1.94	0.126	1
10145	Phosphorus	7723-14-0	423		9.69	2.80	1
01662	Potassium	7440-09-7	3,890		96.9	8.08	1
01667	Sodium	7440-23-5	82.5	J	96.9	16.2	1
06969	Tin	7440-31-5	2.68	J	9.69	0.213	1
06970	Titanium	7440-32-6	1,160		0.969	0.165	1
06971	Vanadium	7440-62-2	38.5		0.969	0.126	1
06972	Zinc	7440-66-6	60.4		3.87	0.194	1
10146	Zirconium	7440-67-7	0.997	J	4.84	0.814	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.170	J	0.387	0.0969	2
06142	Silver	7440-22-4	0.0607	J	0.194	0.0252	2
06144	Strontium	7440-24-6	29.9		0.387	0.0504	2
06145	Thallium	7440-28-0	0.319		0.194	0.0291	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.03		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.74		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.995	U	0.995	0.0426	1
11031	12378-PeCDD	40321-76-4	0.187	JBQ	4.97	0.0604	1
11031	123478-HxCDD	39227-28-6	0.139	JB	4.97	0.0513	1
11031	123678-HxCDD	57653-85-7	0.447	JB	4.97	0.0558	1
11031	123789-HxCDD	19408-74-3	0.514	JBQ	4.97	0.0538	1
11031	1234678-HpCDD	35822-46-9	5.88	B	4.97	0.0530	1
11031	OCDD	3268-87-9	88.1	B	9.95	0.0538	1
11031	2378-TCDF	51207-31-9	0.0575	JBQ	0.995	0.0540	1
11031	12378-PeCDF	57117-41-6	0.300	JBQ	4.97	0.0413	1
11031	23478-PeCDF	57117-31-4	0.149	JBQ	4.97	0.0396	1
11031	123478-HxCDF	70648-26-9	0.131	JB	4.97	0.0407	1
11031	123678-HxCDF	57117-44-9	0.196	JBQ	4.97	0.0353	1
11031	123789-HxCDF	72918-21-9	0.279	JBQ	4.97	0.0464	1
11031	234678-HxCDF	60851-34-5	0.182	JB	4.97	0.0337	1
11031	1234678-HpCDF	67562-39-4	0.891	JB	4.97	0.0228	1
11031	1234789-HpCDF	55673-89-7	0.134	JB	4.97	0.0375	1
11031	OCDF	39001-02-0	2.05	JB	9.95	0.0566	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.186				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	62	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 19:33	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/22/2013 17:17	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/21/2013 02:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 20:07	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:20	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:20	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:20	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-1252-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094793
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:10 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S1252 SDG#: PH057-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:20	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	0.74	J	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.58
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	36	U	36	11	1
10592	Aroclor 5442	12642-23-8	36	U	36	11	1
10592	Aroclor 5460	11126-42-4	36	U	36	11	1
10592	PCB-1016	12674-11-2	19	U	19	3.6	1
10592	PCB-1221	11104-28-2	19	U	19	5.6	1
10592	PCB-1232	11141-16-5	19	U	19	4.5	1
10592	PCB-1242	53469-21-9	19	U	19	4.5	1
10592	PCB-1248	12672-29-6	19	U	19	3.6	1
10592	PCB-1254	11097-69-1	19	U	19	4.8	1
10592	PCB-1260	11096-82-5	19	U	19	4.3	1
10592	PCB-1262	37324-23-5	19	U	19	3.6	1
10592	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,400		43.0	7.74	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	3.64	J	4.30	0.752	1
06946	Barium	7440-39-3	93.5		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.727	J	1.07	0.0719	1
07914	Boron	7440-42-8	3.38	J	10.7	0.902	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0816	1
01650	Calcium	7440-70-2	2,310		21.5	3.59	1
06951	Chromium	7440-47-3	25.4		3.22	0.172	1
06952	Cobalt	7440-48-4	6.67		1.07	0.106	1
06953	Copper	7440-50-8	9.72		2.15	0.311	1
01654	Iron	7439-89-6	24,400		43.0	3.89	1
06955	Lead	7439-92-1	7.62		3.22	0.537	1
01656	Lithium	7439-93-2	27.1		4.3	0.37	1
01657	Magnesium	7439-95-4	4,680		10.7	1.79	1
06958	Manganese	7439-96-5	362		1.07	0.0891	1
06960	Molybdenum	7439-98-7	0.489	J	2.15	0.183	1
06961	Nickel	7440-02-0	13.9		2.15	0.140	1
10145	Phosphorus	7723-14-0	213		10.7	3.10	1
01662	Potassium	7440-09-7	2,210		107	8.96	1
01667	Sodium	7440-23-5	103	J	107	17.9	1
06969	Tin	7440-31-5	2.61	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,230		1.07	0.183	1
06971	Vanadium	7440-62-2	42.9		1.07	0.140	1
06972	Zinc	7440-66-6	50.9		4.30	0.215	1
10146	Zirconium	7440-67-7	1.46	J	5.37	0.902	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.133	J	0.430	0.107	2
06142	Silver	7440-22-4	0.0492	J	0.215	0.0279	2
06144	Strontium	7440-24-6	26.4		0.430	0.0558	2
06145	Thallium	7440-28-0	0.307		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 22 C.	n.a.	6.54		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0341	1
11031	12378-PeCDD	40321-76-4	0.130	JBQ	5.40	0.0426	1
11031	123478-HxCDD	39227-28-6	0.0581	JB	5.40	0.0267	1
11031	123678-HxCDD	57653-85-7	0.0916	JBQ	5.40	0.0291	1
11031	123789-HxCDD	19408-74-3	0.0984	JBQ	5.40	0.0288	1
11031	1234678-HpCDD	35822-46-9	0.737	JBQ	5.40	0.0403	1
11031	OCDD	3268-87-9	10.6	JB	10.8	0.0479	1
11031	2378-TCDF	51207-31-9	0.0310	JBQ	1.08	0.0300	1
11031	12378-PeCDF	57117-41-6	0.123	JB	5.40	0.0255	1
11031	23478-PeCDF	57117-31-4	0.0843	JB	5.40	0.0254	1
11031	123478-HxCDF	70648-26-9	0.0481	JBQ	5.40	0.0145	1
11031	123678-HxCDF	57117-44-9	0.0579	JBQ	5.40	0.0136	1
11031	123789-HxCDF	72918-21-9	0.0453	JBQ	5.40	0.0159	1
11031	234678-HxCDF	60851-34-5	0.0438	JBQ	5.40	0.0112	1
11031	1234678-HpCDF	67562-39-4	0.143	JB	5.40	0.0119	1
11031	1234789-HpCDF	55673-89-7	0.0340	JBQ	5.40	0.0180	1
11031	OCDF	39001-02-0	0.182	JBQ	10.8	0.0551	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0394				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	99	32 - 141
13C12-123678-HxCDD	101	28 - 130
13C12-123789-HxCDD	101	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	99	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13170SLD026	06/23/2013 20:05	Linda M Hartenstine	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13170SLD026	06/20/2013 00:00	Olivia Arosemena	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13169A16A	06/19/2013 03:15	Laura M Krieger	23.58
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316631436	06/15/2013 15:21	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316631436	06/15/2013 15:21	Mitchell R Washel	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	131720002A	06/26/2013 02:51	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	131720002A	06/21/2013 13:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131700023A	06/20/2013 22:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131700023A	06/20/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/26/2013 21:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-852-SA5A-SB-4.5-5.5 Soil
SSFL Phase 3 Subarea 5A

LLI Sample # SW 7094794
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 13:25 by JH

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852-4 SDG#: PH057-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:43	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:22	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:22	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:22	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:22	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13166039401A	06/15/2013 16:05	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401A	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-061413 Water
SSFL Phase 3 Subarea 5A

LLI Sample # WW 7094795
LLI Group # 1397462
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/14/2013 08:00

Submitted: 06/15/2013 09:30
Reported: 06/27/2013 21:03

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

852TB SDG#: PH057-08TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 13:00	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 13:00	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13170SLD026	Sample number(s): 7094786-7094791,7094793-7094794									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	110		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	98		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	102		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	90		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	107		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	100		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	101		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	102		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	95		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	109		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	110		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	102		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	98		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	91		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	105		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	95		71-120		
Batch number: 13169A16A	Sample number(s): 7094794									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	91		67-119		
Batch number: 13173A94A	Sample number(s): 7094795									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	95	75-135	8	30
Batch number: 131720002A	Sample number(s): 7094789-7094791,7094793-7094794									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	67	68	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	100		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 131700023A	Sample number(s): 7094786-7094791,7094793-7094794									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	99		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	104		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	103		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	96		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	79		49-107		
Batch number: 131710637001	Sample number(s): 7094786-7094794									
Aluminum	40.0	U	40.0	7.21	mg/kg	97		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	97		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	94		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	93		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	93		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	89		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	93		80-120		
Calcium	5.59	J	20.0	3.34	mg/kg	96		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	94		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	94		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	91		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	96		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	93		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	97		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	94		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	91		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	92		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	95		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	94		80-120		
Potassium	100 U		100.	8.34	mg/kg	94		80-120		
Sodium	100 U		100.	16.7	mg/kg	94		80-120		
Tin	1.44	J	10.0	0.220	mg/kg	93		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	93		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	95		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	95		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	96		80-120		
Batch number: 131710637001A	Sample number(s): 7094786-7094794									
Silver	0.200	U	0.200	0.0260	mg/kg	102		80-120		
Strontium	0.400	U	0.400	0.0520	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	112		80-120		
Batch number: 131710637001B	Sample number(s): 7094786-7094794									
Selenium	0.400	U	0.400	0.100	mg/kg	112		80-120		
Batch number: 131710638001	Sample number(s): 7094786-7094794									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	89		85-120		
Batch number: 13166039401A	Sample number(s): 7094786-7094789,7094792-7094794									
15a pH by 9045D						99		95-105		
Batch number: 13176162401A	Sample number(s): 7094786-7094794									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13175001	Sample number(s): 7094786-7094791,7094793-7094794								
2378-TCDD	0.0415 J	1.00	0.0363	ng/kg	90		67-158		
12378-PeCDD	0.0611 J	5.00	0.0484	ng/kg	94		70-142		
123478-HxCDD	0.0308 J	5.00	0.0258	ng/kg	92		70-164		
123678-HxCDD	0.0519 J	5.00	0.0279	ng/kg	92		76-134		
123789-HxCDD	0.0471 J	5.00	0.0259	ng/kg	90		64-162		
1234678-HpCDD	0.0996 J	5.00	0.0285	ng/kg	88		70-140		
OCDD	0.326 J	10.0	0.0520	ng/kg	90		78-144		
2378-TCDF	0.0358 J	1.00	0.0342	ng/kg	91		75-158		
12378-PeCDF	0.0700 J	5.00	0.0304	ng/kg	91		80-134		
23478-PeCDF	0.0563 J	5.00	0.0299	ng/kg	94		68-160		
123478-HxCDF	0.0286 J	5.00	0.0150	ng/kg	91		72-134		
123678-HxCDF	0.0359 J	5.00	0.0143	ng/kg	92		84-130		
123789-HxCDF	0.0245 J	5.00	0.0178	ng/kg	89		78-130		
234678-HxCDF	0.0262 J	5.00	0.0141	ng/kg	89		70-156		
1234678-HpCDF	0.0351 J	5.00	0.00870	ng/kg	89		82-122		
1234789-HpCDF	0.0615 J	5.00	0.0137	ng/kg	87		78-138		
OCDF	0.0789 J	10.0	0.0538	ng/kg	87		63-170		
TEQ WHO 2005 - EDLx0.0	0.00890			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13170SLD026	Sample number(s): 7094786-7094791,7094793-7094794 UNSPK: 7094789								
Acenaphthene	82	80	48-127	3	30				
Acenaphthylene	98	94	49-121	5	30				
Anthracene	89	85	52-126	5	30				
Benzo(a)anthracene	80	89	32-135	9	30				
Benzo(a)pyrene	75	81	36-138	7	30				
Benzo(b)fluoranthene	67	89	26-142	24	30				
Benzo(e)pyrene	76	79	70-130	4	30				
Benzo(g,h,i)perylene	58	60	33-141	3	30				
Benzo(k)fluoranthene	79	78	47-129	1	30				
Butylbenzylphthalate	109	103	59-153	5	30				
Di-n-butylphthalate	97	95	62-154	2	30				
Chrysene	75	84	29-148	11	30				
Dibenz(a,h)anthracene	71	71	34-125	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Diethylphthalate	100	96	76-127	3	30				
Dimethylphthalate	92	87	62-136	5	30				
Bis(2-Ethylhexyl)phthalate	89	85	39-167	4	30				
Fluoranthene	79	97	47-135	19	30				
Fluorene	85	81	50-129	4	30				
Indeno(1,2,3-cd)pyrene	66	68	17-136	3	30				
1-Methylnaphthalene	88	83	50-131	5	30				
2-Methylnaphthalene	87	82	28-144	5	30				
Naphthalene	85	81	31-148	5	30				
N-Nitrosodimethylamine	78	74	48-113	6	30				
Di-n-octylphthalate	109	106	52-162	3	30				
Phenanthrene	78	78	29-142	1	30				
Pyrene	77	94	26-143	18	30				
Batch number: 13169A16A	Sample number(s): 7094794 UNSPK: P088264								
11a TPH by EPA 8015B GRO	79	86	39-118	10	30				
Batch number: 131720002A	Sample number(s): 7094789-7094791,7094793-7094794 UNSPK: 7094789								
PCB-1016	100	100	16-146	0	50				
PCB-1260	106	103	40-134	3	50				
Batch number: 131700023A	Sample number(s): 7094786-7094791,7094793-7094794 UNSPK: 7094789								
EFH (C12-C14)	90	92	49-123	3	20				
EFH (C15-C20)	147*	133*	49-123	10	20				
EFH (C21-C30)	582*	66	49-123	100*	20				
EFH (C30-C40)	264 (2)	139 (2)	49-123	20	20				
EFH (C8-C11)	73	76	49-123	5	20				
Batch number: 131710637001	Sample number(s): 7094786-7094794 UNSPK: 7094789 BKG: 7094789								
Aluminum	1018 (2)	-854 (2)	75-125	26*	20	14,100	13,000	9	20
Antimony	51*	42*	75-125	18	20	3.96 U	3.96 U	0 (1)	20
Arsenic	84	74*	75-125	10	20	1.98 J	2.13 J	7 (1)	20
Barium	90	65*	75-125	20	20	88.6	80.2	10	20
Beryllium	89	75	75-125	15	20	0.484 J	0.463 J	4 (1)	20
Boron	84	72*	75-125	15	20	4.12 J	3.94 J	5 (1)	20
Cadmium	76	70*	75-125	8	20	0.990 U	0.990 U	0 (1)	20
Calcium	110 (2)	-34 (2)	75-125	24*	20	2,230	2,010	10	20
Chromium	95	68*	75-125	15	20	18.9	17.7	7	20
Cobalt	80	70*	75-125	12	20	4.38	3.88	12 (1)	20
Copper	87	67*	75-125	18	20	9.21	8.90	3 (1)	20
Iron	-229 (2)	-4694 (2)	75-125	29*	20	17,900	17,400	3	20
Lead	88	74*	75-125	11	20	7.24	6.45	12 (1)	20
Lithium	84	59*	75-125	27*	20	19.5	18.1	7 (1)	20
Magnesium	90 (2)	-394 (2)	75-125	28*	20	3,770	3,560	6	20
Manganese	117 (2)	18 (2)	75-125	16	20	273	270	1	20
Molybdenum	80	70*	75-125	13	20	0.777 J	0.422 J	59* (1)	20
Nickel	82	69*	75-125	13	20	11.0	9.48	15 (1)	20
Phosphorus	89	28*	75-125	15	20	335	296	13	20
Potassium	102	-7*	75-125	27*	20	3,490	3,260	7	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Sodium	83	62*	75-125	27*	20	75.2 J	67.1 J	11 (1)	20
Tin	76	67*	75-125	13	20	2.33 J	1.80 J	26* (1)	20
Titanium	274 (2)	75 (2)	75-125	16	20	1,090	977	11	20
Vanadium	97	72*	75-125	17	20	31.0	29.3	6	20
Zinc	87	63*	75-125	14	20	49.4	42.8	14	20
Zirconium	77	60*	75-125	25*	20	1.41 J	2.03 J	36* (1)	20
Batch number: 131710637001A	Sample number(s): 7094786-7094794 UNSPK: 7094789 BKG: 7094789								
Silver	111	129*	75-125	15	20	0.0579 J	0.0454 J	24* (1)	20
Strontium	115	173*	75-125	13	20	25.1	24.9	1	20
Thallium	101	116	75-125	7	20	0.334	0.312	7 (1)	20
Batch number: 131710637001B	Sample number(s): 7094786-7094794 UNSPK: 7094789 BKG: 7094789								
Selenium	105	118	75-125	11	20	0.163 J	0.176 J	8 (1)	20
Batch number: 131710638001	Sample number(s): 7094786-7094794 UNSPK: 7094789 BKG: 7094789								
3a Mercury 7471A	102	104	65-135	4	20	0.0160 U	0.0164 U	0 (1)	20
Batch number: 13166039401A	Sample number(s): 7094786-7094789,7094792-7094794 BKG: 7094789								
15a pH by 9045D						6.20	6.18	0	3
Batch number: 13176162401A	Sample number(s): 7094786-7094794 BKG: 7094789								
14a Moisture Content by 160.3						0.67	0.64	5	20
14a Moisture Content by 160.3						0.67	0.64	5	20
14a Moisture Content by 160.3						0.67	0.64	5	20
Batch number: 13175001	Sample number(s): 7094786-7094791,7094793-7094794 UNSPK: 7094789								
2378-TCDD	94	93	40-135	4	20				
12378-PeCDD	95	94	40-135	4	20				
123478-HxCDD	97	91	40-135	9	20				
123678-HxCDD	95	92	40-135	5	20				
123789-HxCDD	94	90	40-135	7	20				
1234678-HpCDD	215*	91	40-135	79*	20				
OCDD	324*	121	40-135	72*	20				
2378-TCDF	92	92	40-135	3	20				
12378-PeCDF	90	89	40-135	3	20				
23478-PeCDF	92	90	40-135	4	20				
123478-HxCDF	90	87	40-135	6	20				
123678-HxCDF	89	89	40-135	3	20				
123789-HxCDF	88	87	40-135	3	20				
234678-HxCDF	90	89	40-135	4	20				
1234678-HpCDF	89	88	40-135	3	20				
1234789-HpCDF	86	87	40-135	2	20				
OCDF	85	86	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13170SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7094786	73	80	82
7094787	68	72	75
7094788	59	62	68
7094789	71	76	82
7094790	76	81	86
7094791	70	75	79
7094793	78	86	89
7094794	78	84	86
Blank	81	88	95
LCS	84	92	97
MS	76	81	86
MSD	70	75	79
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13169A16A

	Trifluorotoluene-F
7094794	83
Blank	95
LCS	87
MS	85
MSD	84
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13173A94A

	Trifluorotoluene-F
7094795	69
Blank	68
LCS	74
LCSD	81
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 131720002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7094789	114	117
7094790	112	123*
7094791	113	111
7094793	222*	213*
7094794	115	103
Blank	112	117
LCS	111	120
LCSD	113	114

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
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Surrogate Quality Control

MS	112	123*
MSD	113	111
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131700023A

	Chlorobenzene	Orthoterphenyl
7094786	87	83
7094787	87	90
7094788	82	78
7094789	89	92
7094790	83	69
7094791	91	94
7094793	91	96
7094794	92	89
Blank	96	95
LCS	97	102
MS	83	69
MSD	91	94
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13175001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7094786	70	73	69	72	73	70
7094787	80	81	72	77	79	75
7094788	80	75	71	75	77	72
7094789	82	80	71	75	78	75
7094790	69	72	68	74	79	71
7094791	80	77	69	73	78	73
7094793	68	72	62	71	74	64
7094794	76	83	73	79	99	82
Blank	76	80	74	80	79	74
MS	69	72	68	74	79	71
MSD	80	77	69	73	78	73
OPR	75	80	73	76	78	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7094786	76	68	56	78	77	79
7094787	89	73	62	89	86	87
7094788	82	72	61	80	82	86
7094789	88	75	63	87	84	89
7094790	84	72	65	79	85	87
7094791	86	70	61	83	86	87
7094793	84	66	58	82	81	83
7094794	92	73	57	92	99	101
Blank	96	74	60	90	90	89
MS	84	72	65	79	85	87
MSD	86	70	61	83	86	87

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397462
Reported: 06/27/13 at 09:03 PM

Surrogate Quality Control

OPR	87	76	63	90	86	86
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7094786	81	82	78	67	76	
7094787	88	89	84	74	85	
7094788	84	90	84	71	78	
7094789	89	93	87	73	84	
7094790	87	91	90	67	76	
7094791	88	90	85	68	82	
7094793	83	88	85	66	77	
7094794	101	96	82	70	87	
Blank	93	97	87	71	84	
MS	87	91	90	67	76	
MSD	88	90	85	68	82	
OPR	89	93	83	70	84	
Limits:	28-130	23-140	17-157	24-169	24-185	

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acct# 13013 Ap# 1397462 Sample# 7094786-95

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/14/2013
CarrierName: FedEx
AirbillNo: 796006653747

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130614-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-850-SA5A-SB-0.0-0.5	6/14/13 09:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-850-SA5A-SB-0.0-0.5	6/14/13 09:05	SO	None	1 - 4 oz glass	10 day														X																		
SL-869-SA5A-SB-0.0-0.5	6/14/13 09:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-869-SA5A-SB-0.0-0.5	6/14/13 09:55	SO	None	1 - 4 oz glass	10 day														X																		
SL-870-SA5A-SB-0.0-0.5	6/14/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X											
SL-870-SA5A-SB-0.0-0.5	6/14/13 10:40	SO	None	1 - 4 oz glass	10 day														X																		
SL-852-SA5A-SB-0.0-0.5MS	6/14/13 12:50	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X											X											MS/MSD
SL-852-SA5A-SB-0.0-0.5MS	6/14/13 12:50	SO	None	1 - 8 oz glass	10 day														X																		MS/MSD
SL-1252-SA5A-SB-0.0-0.5	6/14/13 13:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-1252-SA5A-SB-0.0-0.5	6/14/13 13:10	SO	None	1 - 4 oz glass	10 day														X																		
SL-852-SA5A-SB-4.5-5.5	6/14/13 13:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X											
SL-852-SA5A-SB-4.5-5.5	6/14/13 13:25	SO	None	1 - 4 oz glass	10 day														X																		
SL-852-SA5A-SB-4.5-5.5	6/14/13 13:25	SO	None	2 - Encore	10 day																			X													
TB-061413	6/14/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X													

Special Instructions:

Sampler: John Hartsell

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	6/14/2013	1400									
									[illegible]	6/15/13	0930

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C# 1397462

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 6/15/13

Time of Receipt: 0930

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.7	TB	WI	y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/15/13 0958

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 01, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/18/2013
Group Number: 1397820
SDG: PH058
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-061713 Water	7096471
SL-780-SA5A-SB-0.0-0.5 Soil	7096472
SL-780-SA5A-SB-3.0-4.0 Soil	7096473
SL-780-SA5A-SB-3.0-4.0MS Soil	7096474
SL-780-SA5A-SB-3.0-4.0MSD Soil	7096475
SL-780-SA5A-SB-3.0-4.0DUP Soil	7096476
SL-1180-SA5A-SB-3.0-4.0 Soil	7096477
SL-823-SA5A-SB-0.0-0.5 Soil	7096478
SL-825-SA5A-SB-0.0-0.5 Soil	7096479
SL-822-SA5A-SB-0.0-0.5 Soil	7096480
SL-824-SA5A-SB-0.0-0.5 Soil	7096481

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-061713 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7096471
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 08:00

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58-TB SDG#: PH058-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 13:51	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 13:51	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.90	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	5.2		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.81	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.92	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	3.5		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.1	1
12969	Fluoranthene	206-44-0	3.3		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.82	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	120		18	6.1	1
12969	Phenanthrene	85-01-8	2.3		1.7	0.68	1
12969	Pyrene	129-00-0	2.8		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	15		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	30		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1
06935	Arsenic	7440-38-2	4.17		4.05	0.709	1
06946	Barium	7440-39-3	106		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.599	J	1.01	0.0679	1
07914	Boron	7440-42-8	3.33	J	10.1	0.851	1
06949	Cadmium	7440-43-9	0.301	J	1.01	0.0770	1
01650	Calcium	7440-70-2	2,120		20.3	3.38	1
06951	Chromium	7440-47-3	25.1		3.04	0.162	1
06952	Cobalt	7440-48-4	5.48		1.01	0.100	1
06953	Copper	7440-50-8	9.97		2.03	0.294	1
01654	Iron	7439-89-6	20,200		40.5	3.67	1
06955	Lead	7439-92-1	12.4		3.04	0.507	1
01656	Lithium	7439-93-2	20.1		4.1	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,180		10.1	1.69	1
06958	Manganese	7439-96-5	344		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.654	J	2.03	0.172	1
06961	Nickel	7440-02-0	15.0		2.03	0.132	1
10145	Phosphorus	7723-14-0	427		10.1	2.93	1
01662	Potassium	7440-09-7	4,190		101	8.45	1
01667	Sodium	7440-23-5	84.2	J	101	16.9	1
06969	Tin	7440-31-5	2.89	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,270		1.01	0.172	1
06971	Vanadium	7440-62-2	37.5		1.01	0.132	1
06972	Zinc	7440-66-6	64.2		4.05	0.203	1
10146	Zirconium	7440-67-7	4.04	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.202	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0692	J	0.203	0.0263	2
06144	Strontium	7440-24-6	31.7		0.405	0.0527	2
06145	Thallium	7440-28-0	0.405		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0139	J	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	4.55		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.106	JB	1.02	0.0290	1
11031	12378-PeCDD	40321-76-4	0.855	JB	5.11	0.0431	1
11031	123478-HxCDD	39227-28-6	1.16	J	5.11	0.0527	1
11031	123678-HxCDD	57653-85-7	3.12	JB	5.11	0.0558	1
11031	123789-HxCDD	19408-74-3	3.31	JB	5.11	0.0540	1
11031	1234678-HpCDD	35822-46-9	72.9	B	5.11	0.0899	1
11031	OCDD	3268-87-9	1,520	B	10.2	0.0905	1
11031	2378-TCDF	51207-31-9	0.280	J	1.02	0.0418	1
11031	12378-PeCDF	57117-41-6	0.667	JB	5.11	0.0258	1
11031	23478-PeCDF	57117-31-4	0.609	JB	5.11	0.0250	1
11031	123478-HxCDF	70648-26-9	0.443	JB	5.11	0.0306	1
11031	123678-HxCDF	57117-44-9	0.338	JB	5.11	0.0284	1
11031	123789-HxCDF	72918-21-9	0.546	JB	5.11	0.0358	1
11031	234678-HxCDF	60851-34-5	0.378	JB	5.11	0.0282	1
11031	1234678-HpCDF	67562-39-4	4.69	JB	5.11	0.0235	1
11031	1234789-HpCDF	55673-89-7	0.307	JB	5.11	0.0377	1
11031	OCDF	39001-02-0	13.7	B	10.2	0.0708	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.36				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 08:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 05:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 06:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:55	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:47	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:47	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:47	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:47	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:14	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096472
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78000 SDG#: PH058-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.92	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.65
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	10.8		4.15	0.726	1
06946	Barium	7440-39-3	126		1.04	0.0342	1
06947	Beryllium	7440-41-7	1.08		1.04	0.0695	1
07914	Boron	7440-42-8	1.29	J	10.4	0.872	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0789	1
01650	Calcium	7440-70-2	4,440		20.8	3.47	1
06951	Chromium	7440-47-3	36.2		3.11	0.166	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	8.66		1.04	0.103	1
06953	Copper	7440-50-8	17.9		2.08	0.301	1
01654	Iron	7439-89-6	35,600		208	18.8	5
06955	Lead	7439-92-1	11.8		3.11	0.519	1
01656	Lithium	7439-93-2	45.9		4.2	0.35	1
01657	Magnesium	7439-95-4	8,040		10.4	1.73	1
06958	Manganese	7439-96-5	372		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.641	J	2.08	0.176	1
06961	Nickel	7440-02-0	23.3		2.08	0.135	1
10145	Phosphorus	7723-14-0	581		10.4	3.00	1
01662	Potassium	7440-09-7	2,950		104	8.66	1
01667	Sodium	7440-23-5	181		104	17.3	1
06969	Tin	7440-31-5	3.73	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,530		1.04	0.176	1
06971	Vanadium	7440-62-2	59.6		1.04	0.135	1
06972	Zinc	7440-66-6	86.7		4.15	0.208	1
10146	Zirconium	7440-67-7	5.06	J	5.19	0.872	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.338	J	0.415	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0270	2
06144	Strontium	7440-24-6	32.8		0.415	0.0540	2
06145	Thallium	7440-28-0	0.360		0.208	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.93		0.0100	0.0100	1
	The pH was measured in water at 22.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0510 JB	1.04	0.0263	1
11031	12378-PeCDD	40321-76-4	0.0458 JBQ	5.19	0.0253	1
11031	123478-HxCDD	39227-28-6	0.0482 JQ	5.19	0.0239	1
11031	123678-HxCDD	57653-85-7	0.124 JBQ	5.19	0.0264	1
11031	123789-HxCDD	19408-74-3	0.179 JBQ	5.19	0.0247	1
11031	1234678-HpCDD	35822-46-9	0.117 JB	5.19	0.0227	1
11031	OCDD	3268-87-9	0.415 JB	10.4	0.0229	1
11031	2378-TCDF	51207-31-9	1.04 U	1.04	0.0197	1
11031	12378-PeCDF	57117-41-6	0.0358 JBQ	5.19	0.0114	1
11031	23478-PeCDF	57117-31-4	0.0468 JBQ	5.19	0.0109	1
11031	123478-HxCDF	70648-26-9	0.0351 JBQ	5.19	0.00828	1
11031	123678-HxCDF	57117-44-9	0.0554 JBQ	5.19	0.00755	1
11031	123789-HxCDF	72918-21-9	0.0953 JBQ	5.19	0.00870	1
11031	234678-HxCDF	60851-34-5	0.0421 JB	5.19	0.00755	1
11031	1234678-HpCDF	67562-39-4	0.0414 JBQ	5.19	0.00702	1
11031	1234789-HpCDF	55673-89-7	0.0386 JB	5.19	0.0122	1
11031	OCDF	39001-02-0	0.0766 JBQ	10.4	0.0299	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0568			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 07:08	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/21/2013 22:12	Laura M Krieger	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316931449	06/18/2013 22:09	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316931449	06/18/2013 22:10	Lois E Hiltz	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 03:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 10:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 01:45	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:32	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:32	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:32	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:32	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096473
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:32	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:16	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096474
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	36		1.7	0.69	1
12969	Acenaphthylene	208-96-8	34		1.7	0.35	1
12969	Anthracene	120-12-7	34		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	33		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	33		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	34		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	41		19	6.2	1
12969	Chrysene	218-01-9	34		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	34		1.7	0.69	1
12969	Diethylphthalate	84-66-2	40		19	6.2	1
12969	Dimethylphthalate	131-11-3	34		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	39		19	6.2	1
12969	Fluoranthene	206-44-0	35		1.7	0.69	1
12969	Fluorene	86-73-7	34		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	34		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	37		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	36		1.7	0.69	1
12969	Naphthalene	91-20-3	35		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	41		19	6.2	1
12969	Phenanthrene	85-01-8	34		1.7	0.69	1
12969	Pyrene	129-00-0	36		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	22		1	0.2	22.98
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.6	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	3.7	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	4.9	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,000		41.5	7.48	1
06944	Antimony	7440-36-0	31.9		4.15	0.768	1
06935	Arsenic	7440-38-2	25.2		4.15	0.726	1
06946	Barium	7440-39-3	326		1.04	0.0342	1
06947	Beryllium	7440-41-7	6.07		1.04	0.0695	1
07914	Boron	7440-42-8	193		10.4	0.872	1
06949	Cadmium	7440-43-9	4.88		1.04	0.0789	1
01650	Calcium	7440-70-2	4,770		20.8	3.47	1
06951	Chromium	7440-47-3	56.1		3.11	0.166	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096474
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	56.1	1.04	0.103	1
06953	Copper	7440-50-8	40.0	2.08	0.301	1
01654	Iron	7439-89-6	33,500	208	18.8	5
06955	Lead	7439-92-1	25.4	3.11	0.519	1
01656	Lithium	7439-93-2	148	4.2	0.35	1
01657	Magnesium	7439-95-4	7,870	10.4	1.73	1
06958	Manganese	7439-96-5	420	1.04	0.0861	1
06960	Molybdenum	7439-98-7	193	2.08	0.176	1
06961	Nickel	7440-02-0	70.0	2.08	0.135	1
10145	Phosphorus	7723-14-0	636	10.4	3.00	1
01662	Potassium	7440-09-7	4,380	104	8.66	1
01667	Sodium	7440-23-5	1,200	104	17.3	1
06969	Tin	7440-31-5	359	10.4	0.228	1
06970	Titanium	7440-32-6	1,790	1.04	0.176	1
06971	Vanadium	7440-62-2	110	1.04	0.135	1
06972	Zinc	7440-66-6	131	4.15	0.208	1
10146	Zirconium	7440-67-7	107	5.19	0.872	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.57	0.415	0.104	2
06142	Silver	7440-22-4	10.9	0.208	0.0270	2
06144	Strontium	7440-24-6	43.6	0.415	0.0540	2
06145	Thallium	7440-28-0	0.818	0.208	0.0311	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.188	0.0164	0.0098	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.6	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096474
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.7	B	1.02	0.0403	1
11031	12378-PeCDD	40321-76-4	96.6	B	5.10	0.0411	1
11031	123478-HxCDD	39227-28-6	103		5.10	0.0398	1
11031	123678-HxCDD	57653-85-7	101	B	5.10	0.0411	1
11031	123789-HxCDD	19408-74-3	100	B	5.10	0.0413	1
11031	1234678-HpCDD	35822-46-9	99.7	B	5.10	0.0473	1
11031	OCDD	3268-87-9	205	B	10.2	0.0271	1
11031	2378-TCDF	51207-31-9	19.7		1.02	0.0425	1
11031	12378-PeCDF	57117-41-6	101	B	5.10	0.0323	1
11031	23478-PeCDF	57117-31-4	101	B	5.10	0.0333	1
11031	123478-HxCDF	70648-26-9	105	B	5.10	0.0427	1
11031	123678-HxCDF	57117-44-9	101	B	5.10	0.0387	1
11031	123789-HxCDF	72918-21-9	103	B	5.10	0.0506	1
11031	234678-HxCDF	60851-34-5	102	B	5.10	0.0420	1
11031	1234678-HpCDF	67562-39-4	102	B	5.10	0.0248	1
11031	1234789-HpCDF	55673-89-7	101	B	5.10	0.0440	1
11031	OCDF	39001-02-0	201	B	10.2	0.0460	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096474
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 07:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 02:00	Laura M Krieger	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316931449	06/18/2013 22:10	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316931449	06/18/2013 22:12	Lois E Hiltz	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 04:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 11:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 01:56	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:39	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:39	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:39	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096474
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:39	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:20	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096475
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.7	0.69	1
12969	Acenaphthylene	208-96-8	32		1.7	0.35	1
12969	Anthracene	120-12-7	32		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	32		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	30		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	34		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	31		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	34		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	39		19	6.2	1
12969	Chrysene	218-01-9	33		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.7	0.69	1
12969	Diethylphthalate	84-66-2	38		19	6.2	1
12969	Dimethylphthalate	131-11-3	34		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	38		19	6.2	1
12969	Fluoranthene	206-44-0	34		1.7	0.69	1
12969	Fluorene	86-73-7	33		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	31		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.69	1
12969	Naphthalene	91-20-3	34		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	34		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	21		1.0	0.2	24.95
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.6	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	5.8	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,300		41.5	7.48	1
06944	Antimony	7440-36-0	32.8		4.15	0.768	1
06935	Arsenic	7440-38-2	25.0		4.15	0.726	1
06946	Barium	7440-39-3	335		1.04	0.0342	1
06947	Beryllium	7440-41-7	6.16		1.04	0.0695	1
07914	Boron	7440-42-8	194		10.4	0.872	1
06949	Cadmium	7440-43-9	4.89		1.04	0.0789	1
01650	Calcium	7440-70-2	4,830		20.8	3.47	1
06951	Chromium	7440-47-3	57.6		3.11	0.166	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096475
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
06952	Cobalt	7440-48-4	55.1	1.04	0.103	1
06953	Copper	7440-50-8	41.2	2.08	0.301	1
01654	Iron	7439-89-6	34,700	208	18.8	5
06955	Lead	7439-92-1	25.5	3.11	0.519	1
01656	Lithium	7439-93-2	147	4.2	0.35	1
01657	Magnesium	7439-95-4	8,070	10.4	1.73	1
06958	Manganese	7439-96-5	404	1.04	0.0861	1
06960	Molybdenum	7439-98-7	194	2.08	0.176	1
06961	Nickel	7440-02-0	70.8	2.08	0.135	1
10145	Phosphorus	7723-14-0	641	10.4	3.00	1
01662	Potassium	7440-09-7	4,500	104	8.66	1
01667	Sodium	7440-23-5	1,190	104	17.3	1
06969	Tin	7440-31-5	360	10.4	0.228	1
06970	Titanium	7440-32-6	1,840	1.04	0.176	1
06971	Vanadium	7440-62-2	112	1.04	0.135	1
06972	Zinc	7440-66-6	133	4.15	0.208	1
10146	Zirconium	7440-67-7	106	5.19	0.872	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.44	0.415	0.104	2
06142	Silver	7440-22-4	10.6	0.208	0.0270	2
06144	Strontium	7440-24-6	40.3	0.415	0.0540	2
06145	Thallium	7440-28-0	0.803	0.208	0.0311	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.190	0.0170	0.0102	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	4.6	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096475
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.2	B	1.00	0.0336	1
11031	12378-PeCDD	40321-76-4	95.6	B	5.02	0.0336	1
11031	123478-HxCDD	39227-28-6	106		5.02	0.0329	1
11031	123678-HxCDD	57653-85-7	96.3	B	5.02	0.0344	1
11031	123789-HxCDD	19408-74-3	101	B	5.02	0.0334	1
11031	1234678-HpCDD	35822-46-9	98.4	B	5.02	0.0381	1
11031	OCDD	3268-87-9	197	B	10.0	0.0254	1
11031	2378-TCDF	51207-31-9	19.3		1.00	0.0321	1
11031	12378-PeCDF	57117-41-6	98.2	B	5.02	0.0281	1
11031	23478-PeCDF	57117-31-4	98.0	B	5.02	0.0292	1
11031	123478-HxCDF	70648-26-9	102	B	5.02	0.0312	1
11031	123678-HxCDF	57117-44-9	100	B	5.02	0.0289	1
11031	123789-HxCDF	72918-21-9	102	B	5.02	0.0328	1
11031	234678-HxCDF	60851-34-5	101	B	5.02	0.0290	1
11031	1234678-HpCDF	67562-39-4	99.7	B	5.02	0.0253	1
11031	1234789-HpCDF	55673-89-7	100	B	5.02	0.0400	1
11031	OCDF	39001-02-0	196	B	10.0	0.0343	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096475
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 08:12	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 02:38	Laura M Krieger	24.95
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316931449	06/18/2013 22:13	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316931449	06/18/2013 22:13	Lois E Hiltz	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 04:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 12:08	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 02:00	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:48	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:41	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:41	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:41	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096475
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:41	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:22	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096476
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,600		41.5	7.48	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.768	1
06935	Arsenic	7440-38-2	11.2		4.15	0.726	1
06946	Barium	7440-39-3	134		1.04	0.0342	1
06947	Beryllium	7440-41-7	1.11		1.04	0.0695	1
07914	Boron	7440-42-8	10.4	U	10.4	0.872	1
06949	Cadmium	7440-43-9	0.112	J	1.04	0.0789	1
01650	Calcium	7440-70-2	4,450		20.8	3.47	1
06951	Chromium	7440-47-3	35.8		3.11	0.166	1
06952	Cobalt	7440-48-4	11.3		1.04	0.103	1
06953	Copper	7440-50-8	17.5		2.08	0.301	1
01654	Iron	7439-89-6	36,900		208	18.8	5
06955	Lead	7439-92-1	13.2		3.11	0.519	1
01656	Lithium	7439-93-2	47.0		4.2	0.35	1
01657	Magnesium	7439-95-4	8,090		10.4	1.73	1
06958	Manganese	7439-96-5	499		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.467	J	2.08	0.176	1
06961	Nickel	7440-02-0	25.7		2.08	0.135	1
10145	Phosphorus	7723-14-0	593		10.4	3.00	1
01662	Potassium	7440-09-7	2,970		104	8.66	1
01667	Sodium	7440-23-5	185		104	17.3	1
06969	Tin	7440-31-5	3.75	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,520		1.04	0.176	1
06971	Vanadium	7440-62-2	59.8		1.04	0.135	1
06972	Zinc	7440-66-6	87.4		4.15	0.208	1
10146	Zirconium	7440-67-7	5.39		5.19	0.872	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.328	J	0.415	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0270	2
06144	Strontium	7440-24-6	32.5		0.415	0.0540	2
06145	Thallium	7440-28-0	0.371		0.208	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.91		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.6		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-780-SA5A-SB-3.0-4.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096476
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:25 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

78030 SDG#: PH058-03DUP

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 01:52	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:39	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:37	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:18	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	0.79	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,900		42.4	7.64	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.784	1
06935	Arsenic	7440-38-2	12.8		4.24	0.742	1
06946	Barium	7440-39-3	171		1.06	0.0350	1
06947	Beryllium	7440-41-7	1.47		1.06	0.0710	1
07914	Boron	7440-42-8	1.38	J	10.6	0.890	1
06949	Cadmium	7440-43-9	0.103	J	1.06	0.0806	1
01650	Calcium	7440-70-2	6,080		21.2	3.54	1
06951	Chromium	7440-47-3	49.7		3.18	0.170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	12.8		1.06	0.105	1
06953	Copper	7440-50-8	27.4		2.12	0.307	1
01654	Iron	7439-89-6	44,500		212	19.2	5
06955	Lead	7439-92-1	16.6		3.18	0.530	1
01656	Lithium	7439-93-2	52.7		4.2	0.36	1
01657	Magnesium	7439-95-4	10,500		10.6	1.77	1
06958	Manganese	7439-96-5	618		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.332	J	2.12	0.180	1
06961	Nickel	7440-02-0	32.2		2.12	0.138	1
10145	Phosphorus	7723-14-0	611		10.6	3.06	1
01662	Potassium	7440-09-7	3,110		106	8.84	1
01667	Sodium	7440-23-5	270		106	17.7	1
06969	Tin	7440-31-5	4.13	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,730		1.06	0.180	1
06971	Vanadium	7440-62-2	78.1		1.06	0.138	1
06972	Zinc	7440-66-6	102		4.24	0.212	1
10146	Zirconium	7440-67-7	5.38		5.30	0.890	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.265	J	0.424	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0276	2
06144	Strontium	7440-24-6	47.4		0.424	0.0551	2
06145	Thallium	7440-28-0	0.393		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0525 JB	1.04	0.0273	1
11031	12378-PeCDD	40321-76-4	0.0770 JB	5.19	0.0277	1
11031	123478-HxCDD	39227-28-6	0.0407 JQ	5.19	0.0201	1
11031	123678-HxCDD	57653-85-7	0.0499 JB	5.19	0.0218	1
11031	123789-HxCDD	19408-74-3	0.135 JBQ	5.19	0.0199	1
11031	1234678-HpCDD	35822-46-9	0.169 JB	5.19	0.0216	1
11031	OCDD	3268-87-9	0.911 JB	10.4	0.0192	1
11031	2378-TCDF	51207-31-9	0.0192 JQ	1.04	0.0173	1
11031	12378-PeCDF	57117-41-6	0.0651 JBQ	5.19	0.0116	1
11031	23478-PeCDF	57117-31-4	0.0806 JBQ	5.19	0.0119	1
11031	123478-HxCDF	70648-26-9	0.0563 JBQ	5.19	0.00889	1
11031	123678-HxCDF	57117-44-9	0.0448 JBQ	5.19	0.00824	1
11031	123789-HxCDF	72918-21-9	0.0687 JBQ	5.19	0.00942	1
11031	234678-HxCDF	60851-34-5	0.0378 JBQ	5.19	0.00824	1
11031	1234678-HpCDF	67562-39-4	0.0426 JBQ	5.19	0.00664	1
11031	1234789-HpCDF	55673-89-7	0.0502 JB	5.19	0.0108	1
11031	OCDF	39001-02-0	0.142 JB	10.4	0.0246	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.137			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	62	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 09:15	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/21/2013 20:55	Laura M Krieger	27
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201316931449	06/18/2013 22:14	Lois E Hiltz	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201316931449	06/18/2013 22:15	Lois E Hiltz	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 04:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 13:04	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 02:07	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 19:59	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:49	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-1180-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096477
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 09:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

11803 SDG#: PH058-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:26	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	4.3		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.3	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.2	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	200		18	6.1	1
12969	Phenanthrene	85-01-8	1.3	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	8.8		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	18		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		39.3	7.08	1
06944	Antimony	7440-36-0	3.93	U	3.93	0.727	1
06935	Arsenic	7440-38-2	3.94		3.93	0.688	1
06946	Barium	7440-39-3	124		0.982	0.0324	1
06947	Beryllium	7440-41-7	0.581	J	0.982	0.0658	1
07914	Boron	7440-42-8	4.05	J	9.82	0.825	1
06949	Cadmium	7440-43-9	0.344	J	0.982	0.0746	1
01650	Calcium	7440-70-2	2,850		19.6	3.28	1
06951	Chromium	7440-47-3	20.6		2.95	0.157	1
06952	Cobalt	7440-48-4	5.69		0.982	0.0972	1
06953	Copper	7440-50-8	14.8		1.96	0.285	1
01654	Iron	7439-89-6	20,100		39.3	3.56	1
06955	Lead	7439-92-1	11.2		2.95	0.491	1
01656	Lithium	7439-93-2	19.5		3.9	0.33	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,250		9.82	1.64	1
06958	Manganese	7439-96-5	401		0.982	0.0815	1
06960	Molybdenum	7439-98-7	0.510	J	1.96	0.167	1
06961	Nickel	7440-02-0	13.1		1.96	0.128	1
10145	Phosphorus	7723-14-0	507		9.82	2.84	1
01662	Potassium	7440-09-7	4,340		98.2	8.19	1
01667	Sodium	7440-23-5	79.6	J	98.2	16.4	1
06969	Tin	7440-31-5	2.74	J	9.82	0.216	1
06970	Titanium	7440-32-6	1,230		0.982	0.167	1
06971	Vanadium	7440-62-2	35.9		0.982	0.128	1
06972	Zinc	7440-66-6	68.8		3.93	0.196	1
10146	Zirconium	7440-67-7	3.28	J	4.91	0.825	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.226	J	0.393	0.0982	2
06142	Silver	7440-22-4	0.0601	J	0.196	0.0255	2
06144	Strontium	7440-24-6	40.3		0.393	0.0511	2
06145	Thallium	7440-28-0	0.431		0.196	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0120	J	0.0167	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.58		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0438	JBQ	1.02	0.0243	1
11031	12378-PeCDD	40321-76-4	0.325	JB	5.10	0.0279	1
11031	123478-HxCDD	39227-28-6	0.489	JQ	5.10	0.0417	1
11031	123678-HxCDD	57653-85-7	1.20	JB	5.10	0.0444	1
11031	123789-HxCDD	19408-74-3	1.58	JB	5.10	0.0423	1
11031	1234678-HpCDD	35822-46-9	24.3	B	5.10	0.0507	1
11031	OCDD	3268-87-9	463	B	10.2	0.0417	1
11031	2378-TCDF	51207-31-9	0.447	JQ	1.02	0.0388	1
11031	12378-PeCDF	57117-41-6	0.338	JB	5.10	0.0190	1
11031	23478-PeCDF	57117-31-4	0.285	JB	5.10	0.0187	1
11031	123478-HxCDF	70648-26-9	0.189	JBQ	5.10	0.0217	1
11031	123678-HxCDF	57117-44-9	0.172	JB	5.10	0.0200	1
11031	123789-HxCDF	72918-21-9	0.501	JB	5.10	0.0233	1
11031	234678-HxCDF	60851-34-5	0.186	JB	5.10	0.0199	1
11031	1234678-HpCDF	67562-39-4	1.69	JB	5.10	0.0124	1
11031	1234789-HpCDF	55673-89-7	0.136	JB	5.10	0.0200	1
11031	OCDF	39001-02-0	4.55	JB	10.2	0.0270	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.19				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 09:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 05:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 14:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:11	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:56	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:56	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:56	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:56	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:28	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-823-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096478
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 10:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82300 SDG#: PH058-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.33	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.33	1
12969	Benzo(a)anthracene	56-55-3	0.81	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	0.97	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	2.8		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.7		1.7	0.33	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.8		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	0.75	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.9		1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	9.8		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	29		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		38.8	7.00	1
06944	Antimony	7440-36-0	3.88	U	3.88	0.718	1
06935	Arsenic	7440-38-2	3.69	J	3.88	0.679	1
06946	Barium	7440-39-3	113		0.970	0.0320	1
06947	Beryllium	7440-41-7	0.579	J	0.970	0.0650	1
07914	Boron	7440-42-8	3.50	J	9.70	0.815	1
06949	Cadmium	7440-43-9	0.344	J	0.970	0.0737	1
01650	Calcium	7440-70-2	2,490		19.4	3.24	1
06951	Chromium	7440-47-3	21.2		2.91	0.155	1
06952	Cobalt	7440-48-4	5.30		0.970	0.0961	1
06953	Copper	7440-50-8	9.90		1.94	0.281	1
01654	Iron	7439-89-6	19,700		38.8	3.51	1
06955	Lead	7439-92-1	8.52		2.91	0.485	1
01656	Lithium	7439-93-2	21.0		3.9	0.33	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,240		9.70	1.62	1
06958	Manganese	7439-96-5	354		0.970	0.0805	1
06960	Molybdenum	7439-98-7	0.488	J	1.94	0.165	1
06961	Nickel	7440-02-0	12.8		1.94	0.126	1
10145	Phosphorus	7723-14-0	481		9.70	2.80	1
01662	Potassium	7440-09-7	4,210		97.0	8.09	1
01667	Sodium	7440-23-5	77.3	J	97.0	16.2	1
06969	Tin	7440-31-5	2.80	J	9.70	0.213	1
06970	Titanium	7440-32-6	1,230		0.970	0.165	1
06971	Vanadium	7440-62-2	35.7		0.970	0.126	1
06972	Zinc	7440-66-6	65.5		3.88	0.194	1
10146	Zirconium	7440-67-7	3.44	J	4.85	0.815	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.160	J	0.388	0.0970	2
06142	Silver	7440-22-4	0.0529	J	0.194	0.0252	2
06144	Strontium	7440-24-6	37.9		0.388	0.0505	2
06145	Thallium	7440-28-0	0.405		0.194	0.0291	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0155	J	0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.41		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.91		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0362	JBQ	0.999	0.0227	1
11031	12378-PeCDD	40321-76-4	0.309	JBQ	5.00	0.0283	1
11031	123478-HxCDD	39227-28-6	0.356	J	5.00	0.0363	1
11031	123678-HxCDD	57653-85-7	0.962	JB	5.00	0.0387	1
11031	123789-HxCDD	19408-74-3	1.03	JB	5.00	0.0370	1
11031	1234678-HpCDD	35822-46-9	22.4	B	5.00	0.0475	1
11031	OCDD	3268-87-9	475	B	9.99	0.0359	1
11031	2378-TCDF	51207-31-9	0.999	U	0.999	0.0320	1
11031	12378-PeCDF	57117-41-6	0.314	JB	5.00	0.0175	1
11031	23478-PeCDF	57117-31-4	0.254	JBQ	5.00	0.0179	1
11031	123478-HxCDF	70648-26-9	0.218	JB	5.00	0.0187	1
11031	123678-HxCDF	57117-44-9	0.144	JB	5.00	0.0176	1
11031	123789-HxCDF	72918-21-9	0.462	JB	5.00	0.0269	1
11031	234678-HxCDF	60851-34-5	0.191	JB	5.00	0.0178	1
11031	1234678-HpCDF	67562-39-4	2.15	JB	5.00	0.0109	1
11031	1234789-HpCDF	55673-89-7	0.163	JB	5.00	0.0185	1
11031	OCDF	39001-02-0	6.44	JB	9.99	0.0276	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.737				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 10:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 05:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 14:57	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:15	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 08:59	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 08:59	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 08:59	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 08:59	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:34	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-825-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096479
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 11:05 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82500 SDG#: PH058-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.95	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	7.6		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.71	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.7		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	2.0		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	0.69	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	170		18	6.1	1
12969	Phenanthrene	85-01-8	1.1	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.9		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.0	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	19		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	47		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		39.9	7.20	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.739	1
06935	Arsenic	7440-38-2	3.98	J	3.99	0.699	1
06946	Barium	7440-39-3	122		0.998	0.0329	1
06947	Beryllium	7440-41-7	0.604	J	0.998	0.0669	1
07914	Boron	7440-42-8	3.81	J	9.98	0.839	1
06949	Cadmium	7440-43-9	0.289	J	0.998	0.0759	1
01650	Calcium	7440-70-2	2,680		20.0	3.33	1
06951	Chromium	7440-47-3	20.9		3.00	0.160	1
06952	Cobalt	7440-48-4	5.66		0.998	0.0988	1
06953	Copper	7440-50-8	10.6		2.00	0.290	1
01654	Iron	7439-89-6	20,600		39.9	3.61	1
06955	Lead	7439-92-1	8.03		3.00	0.499	1
01656	Lithium	7439-93-2	21.0		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,350		9.98	1.67	1
06958	Manganese	7439-96-5	378		0.998	0.0829	1
06960	Molybdenum	7439-98-7	0.468	J	2.00	0.170	1
06961	Nickel	7440-02-0	13.4		2.00	0.130	1
10145	Phosphorus	7723-14-0	455		9.98	2.89	1
01662	Potassium	7440-09-7	4,180		99.8	8.33	1
01667	Sodium	7440-23-5	78.6	J	99.8	16.7	1
06969	Tin	7440-31-5	2.77	J	9.98	0.220	1
06970	Titanium	7440-32-6	1,160		0.998	0.170	1
06971	Vanadium	7440-62-2	36.7		0.998	0.130	1
06972	Zinc	7440-66-6	68.6		3.99	0.200	1
10146	Zirconium	7440-67-7	3.21	J	4.99	0.839	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.201	J	0.399	0.0998	2
06142	Silver	7440-22-4	0.0707	J	0.200	0.0260	2
06144	Strontium	7440-24-6	41.4		0.399	0.0519	2
06145	Thallium	7440-28-0	0.453		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.08		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0675	JBQ	1.00	0.0265	1
11031	12378-PeCDD	40321-76-4	0.472	JB	5.02	0.0362	1
11031	123478-HxCDD	39227-28-6	0.620	JQ	5.02	0.0420	1
11031	123678-HxCDD	57653-85-7	1.56	JB	5.02	0.0426	1
11031	123789-HxCDD	19408-74-3	1.76	JB	5.02	0.0443	1
11031	1234678-HpCDD	35822-46-9	38.1	B	5.02	0.0685	1
11031	OCDD	3268-87-9	855	B	10.0	0.0466	1
11031	2378-TCDF	51207-31-9	0.129	JQ	1.00	0.0271	1
11031	12378-PeCDF	57117-41-6	0.296	JB	5.02	0.0182	1
11031	23478-PeCDF	57117-31-4	0.183	JB	5.02	0.0184	1
11031	123478-HxCDF	70648-26-9	0.233	JB	5.02	0.0206	1
11031	123678-HxCDF	57117-44-9	0.202	JB	5.02	0.0196	1
11031	123789-HxCDF	72918-21-9	0.428	JB	5.02	0.0228	1
11031	234678-HxCDF	60851-34-5	0.193	JB	5.02	0.0202	1
11031	1234678-HpCDF	67562-39-4	3.66	JB	5.02	0.0165	1
11031	1234789-HpCDF	55673-89-7	0.262	JBQ	5.02	0.0264	1
11031	OCDF	39001-02-0	13.7	B	10.0	0.0308	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.65				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 10:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 06:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 15:54	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:19	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:01	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:01	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:01	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:01	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:36	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-822-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096480
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 14:35 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82200 SDG#: PH058-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	6.1		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	0.91	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	2.3		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	3.2		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	0.89	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	230		18	6.0	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.67	1
12969	Pyrene	129-00-0	2.4		1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	30		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		39.5	7.12	1
06944	Antimony	7440-36-0	3.95	U	3.95	0.731	1
06935	Arsenic	7440-38-2	4.18		3.95	0.691	1
06946	Barium	7440-39-3	116		0.988	0.0326	1
06947	Beryllium	7440-41-7	0.628	J	0.988	0.0662	1
07914	Boron	7440-42-8	2.70	J	9.88	0.830	1
06949	Cadmium	7440-43-9	0.252	J	0.988	0.0751	1
01650	Calcium	7440-70-2	2,350		19.8	3.30	1
06951	Chromium	7440-47-3	21.7		2.96	0.158	1
06952	Cobalt	7440-48-4	5.49		0.988	0.0978	1
06953	Copper	7440-50-8	10.1		1.98	0.286	1
01654	Iron	7439-89-6	20,500		39.5	3.58	1
06955	Lead	7439-92-1	8.76		2.96	0.494	1
01656	Lithium	7439-93-2	20.6		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,220		9.88	1.65	1
06958	Manganese	7439-96-5	355		0.988	0.0820	1
06960	Molybdenum	7439-98-7	0.520	J	1.98	0.168	1
06961	Nickel	7440-02-0	13.7		1.98	0.128	1
10145	Phosphorus	7723-14-0	432		9.88	2.85	1
01662	Potassium	7440-09-7	4,030		98.8	8.24	1
01667	Sodium	7440-23-5	81.2	J	98.8	16.5	1
06969	Tin	7440-31-5	2.87	J	9.88	0.217	1
06970	Titanium	7440-32-6	1,180		0.988	0.168	1
06971	Vanadium	7440-62-2	37.7		0.988	0.128	1
06972	Zinc	7440-66-6	64.2		3.95	0.198	1
10146	Zirconium	7440-67-7	3.47	J	4.94	0.830	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.196	J	0.395	0.0988	2
06142	Silver	7440-22-4	0.0558	J	0.198	0.0257	2
06144	Strontium	7440-24-6	33.7		0.395	0.0514	2
06145	Thallium	7440-28-0	0.365		0.198	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0107	J	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.67		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0442	JB	1.00	0.0232	1
11031	12378-PeCDD	40321-76-4	0.403	JB	5.00	0.0279	1
11031	123478-HxCDD	39227-28-6	0.362	JQ	5.00	0.0357	1
11031	123678-HxCDD	57653-85-7	0.988	JB	5.00	0.0375	1
11031	123789-HxCDD	19408-74-3	1.04	JB	5.00	0.0346	1
11031	1234678-HpCDD	35822-46-9	21.6	B	5.00	0.0487	1
11031	OCDD	3268-87-9	423	B	10.0	0.0355	1
11031	2378-TCDF	51207-31-9	0.179	J	1.00	0.0270	1
11031	12378-PeCDF	57117-41-6	0.348	JB	5.00	0.0166	1
11031	23478-PeCDF	57117-31-4	0.266	JB	5.00	0.0166	1
11031	123478-HxCDF	70648-26-9	0.256	JB	5.00	0.0186	1
11031	123678-HxCDF	57117-44-9	0.222	JB	5.00	0.0163	1
11031	123789-HxCDF	72918-21-9	0.308	JB	5.00	0.0205	1
11031	234678-HxCDF	60851-34-5	0.223	JB	5.00	0.0172	1
11031	1234678-HpCDF	67562-39-4	2.73	JB	5.00	0.0141	1
11031	1234789-HpCDF	55673-89-7	0.210	JB	5.00	0.0238	1
11031	OCDF	39001-02-0	8.46	JB	10.0	0.0257	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.23				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 11:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730015A	06/25/2013 06:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730015A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13177003	06/29/2013 16:51	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13177003	06/26/2013 12:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:23	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:04	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:04	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:04	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:04	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:38	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-824-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7096481
LL Group # 1397820
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/17/2013 13:45 by VC

Submitted: 06/18/2013 09:40
Reported: 07/01/2013 16:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

82400 SDG#: PH058-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13169039401A	06/18/2013 20:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13178SLA026	Sample number(s): 7096472-7096475,7096477-7096481									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	97		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	97		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	106		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	97		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	87		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13172A16A	Sample number(s): 7096473-7096475,7096477									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	85		67-119		
Batch number: 13173A94A	Sample number(s): 7096471									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	95	75-135	8	30
Batch number: 131730015A	Sample number(s): 7096472-7096475,7096477-7096481									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	100		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	112		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	105		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	102		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	82		49-107		
Batch number: 131770637001	Sample number(s): 7096472-7096481									
Aluminum	11.5	J	40.0	7.21	mg/kg	105		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	110		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	1.25	J	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.1		20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	106		80-120		
Iron	4.06	J	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	1.74	J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	103		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.50	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.300	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 131770637001A	Sample number(s): 7096472-7096481									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.128	J	0.400	0.0520	mg/kg	110		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 131770637001B	Sample number(s): 7096472-7096481									
Selenium	0.400	U	0.400	0.100	mg/kg	109		80-120		
Batch number: 131780638001	Sample number(s): 7096472-7096481									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13169039401A	Sample number(s): 7096472-7096473,7096476-7096481									
15a pH by 9045D						100		95-105		
Batch number: 13176162401B	Sample number(s): 7096472-7096481									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13177003	Sample number(s): 7096472-7096475,7096477-7096481									
2378-TCDD	0.0397	J	1.00	0.0313	ng/kg	93		67-158		
12378-PeCDD	0.0343	J	5.00	0.0266	ng/kg	96		70-142		
123478-HxCDD	5.00	U	5.00	0.0161	ng/kg	102		70-164		
123678-HxCDD	0.0315	J	5.00	0.0173	ng/kg	99		76-134		
123789-HxCDD	0.0378	J	5.00	0.0174	ng/kg	99		64-162		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDD	0.0684	J	5.00	0.0181	ng/kg	98		70-140		
OCDD	0.316	J	10.0	0.0221	ng/kg	98		78-144		
2378-TCDF	1.00	U	1.00	0.0236	ng/kg	99		75-158		
12378-PeCDF	0.0877	J	5.00	0.0163	ng/kg	97		80-134		
23478-PeCDF	0.0375	J	5.00	0.0156	ng/kg	98		68-160		
123478-HxCDF	0.0365	J	5.00	0.0116	ng/kg	101		72-134		
123678-HxCDF	0.0269	J	5.00	0.0106	ng/kg	99		84-130		
123789-HxCDF	0.0504	J	5.00	0.0121	ng/kg	106		78-130		
234678-HxCDF	0.0180	J	5.00	0.0108	ng/kg	102		70-156		
1234678-HpCDF	0.0353	J	5.00	0.00660	ng/kg	98		82-122		
1234789-HpCDF	0.0624	J	5.00	0.0100	ng/kg	100		78-138		
OCDF	0.0781	J	10.0	0.0240	ng/kg	98		63-170		
TEQ WHO 2005 - EDLx0.0	0.0178				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13178SLA026	Sample number(s): 7096472-7096475,7096477-7096481 UNSPK: 7096473								
Acenaphthene	105	102	48-127	3	30				
Acenaphthylene	97	93	49-121	5	30				
Anthracene	99	93	52-126	6	30				
Benzo(a)anthracene	97	92	32-135	5	30				
Benzo(a)pyrene	95	88	36-138	8	30				
Benzo(b)fluoranthene	108	95	26-142	12	30				
Benzo(e)pyrene	94	89	70-130	6	30				
Benzo(g,h,i)perylene	97	90	33-141	8	30				
Benzo(k)fluoranthene	96	97	47-129	1	30				
Butylbenzylphthalate	114	112	59-153	1	30				
Di-n-butylphthalate	118	114	62-154	4	30				
Chrysene	99	94	29-148	5	30				
Dibenz(a,h)anthracene	98	92	34-125	7	30				
Diethylphthalate	115	111	76-127	4	30				
Dimethylphthalate	99	98	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	112	109	39-167	3	30				
Fluoranthene	102	97	47-135	5	30				
Fluorene	97	95	50-129	2	30				
Indeno(1,2,3-cd)pyrene	98	91	17-136	7	30				
1-Methylnaphthalene	106	103	50-131	3	30				
2-Methylnaphthalene	103	100	28-144	3	30				
Naphthalene	100	98	31-148	2	30				
N-Nitrosodimethylamine	92	91	48-113	2	30				
Di-n-octylphthalate	117	114	52-162	3	30				
Phenanthrene	97	95	29-142	2	30				
Pyrene	103	98	26-143	4	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13172A16A	Sample number(s): 7096473-7096475,7096477 UNSPK: 7096473								
11a TPH by EPA 8015B GRO	102	91	39-118	4	30				
Batch number: 131730015A	Sample number(s): 7096472-7096475,7096477-7096481 UNSPK: 7096473								
EFH (C12-C14)	89	84	49-123	5	20				
EFH (C15-C20)	99	101	49-123	2	20				
EFH (C21-C30)	84	106	49-123	23*	20				
EFH (C30-C40)	92	110	49-123	17	20				
EFH (C8-C11)	77	73	49-123	6	20				
Batch number: 131770637001	Sample number(s): 7096472-7096481 UNSPK: 7096473 BKG: 7096473								
Aluminum	1599 (2)	1728 (2)	75-125	1	20	21,700	21,600	0	20
Antimony	62*	63*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	93	91	75-125	1	20	10.3	10.7	4 (1)	20
Barium	97	101	75-125	3	20	120	127	6	20
Beryllium	96	98	75-125	2	20	1.03	1.06	2 (1)	20
Boron	92	93	75-125	0	20	1.23 J	9.90 U	200* (1)	20
Cadmium	94	94	75-125	0	20	0.990 U	0.107 J	200* (1)	20
Calcium	80 (2)	95 (2)	75-125	1	20	4,230	4,240	0	20
Chromium	96	103	75-125	3	20	34.6	34.1	1	20
Cobalt	91	89	75-125	2	20	8.26	10.8	27*	20
Copper	85	90	75-125	3	20	17.1	16.7	2	20
Iron	-2088 (2)	-864 (2)	75-125	4	20	34,000	35,200	3	20
Lead	88	88	75-125	0	20	11.2	12.6	12 (1)	20
Lithium	98	98	75-125	0	20	43.8	44.8	2	20
Magnesium	-83 (2)	13 (2)	75-125	3	20	7,670	7,720	1	20
Manganese	92 (2)	61 (2)	75-125	4	20	355	476	29*	20
Molybdenum	93	93	75-125	0	20	0.612 J	0.446 J	31* (1)	20
Nickel	90	91	75-125	1	20	22.2	24.5	10	20
Phosphorus	52 (2)	57 (2)	75-125	1	20	555	566	2	20
Potassium	138*	149*	75-125	3	20	2,820	2,830	1	20
Sodium	99	97	75-125	1	20	173	177	2 (1)	20
Tin	86	86	75-125	0	20	3.56 J	3.58 J	1 (1)	20
Titanium	251 (2)	296 (2)	75-125	3	20	1,460	1,450	1	20
Vanadium	97	101	75-125	2	20	56.9	57.1	0	20
Zinc	85	89	75-125	2	20	82.7	83.4	1	20
Zirconium	98	97	75-125	1	20	4.82 J	5.14	6 (1)	20
Batch number: 131770637001A	Sample number(s): 7096472-7096481 UNSPK: 7096473 BKG: 7096473								
Silver	105	102	75-125	3	20	0.198 U	0.198 U	0 (1)	20
Strontium	130*	90	75-125	8	20	31.3	31.0	1	20
Thallium	110	107	75-125	2	20	0.343	0.354	3 (1)	20
Batch number: 131770637001B	Sample number(s): 7096472-7096481 UNSPK: 7096473 BKG: 7096473								
Selenium	108	101	75-125	5	20	0.322 J	0.313 J	3 (1)	20
Batch number: 131780638001	Sample number(s): 7096472-7096481 UNSPK: 7096473 BKG: 7096473								
3a Mercury 7471A	115	112	65-135	1	20	0.0157 U	0.0164 U	0 (1)	20
Batch number: 13169039401A	Sample number(s): 7096472-7096473,7096476-7096481 BKG: 7096473								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
15a pH by 9045D						6.93	6.91	0	3
Batch number: 13176162401B	Sample number(s): 7096472-7096481 BKG: 7096473								
14a Moisture Content by 160.3						4.6	4.7	2	20
14a Moisture Content by 160.3						4.6	4.7	2	20
14a Moisture Content by 160.3						4.6	4.7	2	20
Batch number: 13177003	Sample number(s): 7096472-7096475,7096477-7096481 UNSPK: 7096473								
2378-TCDD	91	91	40-135	2	20				
12378-PeCDD	95	95	40-135	1	20				
123478-HxCDD	101	105	40-135	2	20				
123678-HxCDD	99	96	40-135	5	20				
123789-HxCDD	98	101	40-135	1	20				
1234678-HpCDD	98	98	40-135	1	20				
OCDD	100	98	40-135	4	20				
2378-TCDF	97	96	40-135	2	20				
12378-PeCDF	99	98	40-135	3	20				
23478-PeCDF	99	98	40-135	3	20				
123478-HxCDF	103	102	40-135	3	20				
123678-HxCDF	99	100	40-135	1	20				
123789-HxCDF	101	101	40-135	1	20				
234678-HxCDF	100	100	40-135	2	20				
1234678-HpCDF	100	99	40-135	2	20				
1234789-HpCDF	99	100	40-135	1	20				
OCDF	98	98	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13178SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7096472	80	78	99
7096473	76	74	96
7096474	85	91	103
7096475	82	84	98
7096477	84	87	101
7096478	85	85	101
7096479	87	89	102
7096480	84	90	100
7096481	85	87	99
Blank	87	94	101
LCS	85	93	100
MS	85	91	103
MSD	82	84	98

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Surrogate Quality Control

Limits: 54-129 61-134 55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13172A16A

	Trifluorotoluene-F
7096473	89
7096474	83
7096475	93
7096477	90
Blank	90
LCS	87
MS	83
MSD	93

Limits: 61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13173A94A

	Trifluorotoluene-F
7096471	69
Blank	68
LCS	74
LCSD	81

Limits: 63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131730015A

	Chlorobenzene	Orthoterphenyl
7096472	93	100
7096473	91	86
7096474	93	97
7096475	90	91
7096477	87	78
7096478	86	94
7096479	91	97
7096480	92	98
7096481	86	90
Blank	99	82
LCS	100	94
MS	93	97
MSD	90	91

Limits: 37-125 66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13177003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7096472	69	71	78	82	77	71
7096473	62	68	74	80	75	75
7096474	64	72	77	84	79	75

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1397820
Reported: 07/01/13 at 04:33 PM

Surrogate Quality Control

7096475	63	69	76	81	77	79
7096477	62	65	72	79	73	73
7096478	66	70	76	82	75	76
7096479	69	72	75	82	76	61
7096480	73	76	84	90	84	85
7096481	73	73	80	88	80	77
Blank	65	69	77	85	80	84
MS	64	72	77	84	79	75
MSD	63	69	76	81	77	79
OPR	65	70	74	83	77	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7096472	87	63	54	73	73	77
7096473	95	65	60	71	76	76
7096474	98	64	60	76	78	81
7096475	94	69	66	71	74	78
7096477	93	66	62	67	73	72
7096478	94	68	63	72	75	76
7096479	96	65	59	75	74	77
7096480	102	75	68	79	80	84
7096481	101	65	57	76	78	80
Blank	109	81	88	73	80	85
MS	98	64	60	76	78	81
MSD	94	69	66	71	74	78
OPR	109	76	80	74	79	81
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7096472	75	69	60	64	73	
7096473	75	75	70	57	72	
7096474	79	79	78	58	76	
7096475	74	76	74	58	72	
7096477	72	74	72	57	69	
7096478	73	74	72	62	73	
7096479	74	74	70	64	78	
7096480	80	81	78	69	80	
7096481	77	76	71	67	78	
Blank	81	91	101	59	72	
MS	79	79	78	58	76	
MSD	74	76	74	58	72	
OPR	80	87	94	56	75	
Limits:	28-130	23-140	17-157	24-169	24-185	

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13013 1397820 7096471-81

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/17/2013
CarrierName: FedEx
AirbillNo: 796020556769

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130617-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-061713	6/17/13 08:00	WQ	None	3 - 40 mL Vial	10 day																			X												
SL-780-SA5A-SB-0.0-0.5	6/17/13 09:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-780-SA5A-SB-0.0-0.5	6/17/13 09:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-780-SA5A-SB-3.0-4.0MS	6/17/13 09:25	SO	None	6 - 16 oz glass	10 day	X	X					X		X				X								X										MS/MSD
SL-780-SA5A-SB-3.0-4.0MS	6/17/13 09:25	SO	None	6 - Encore	10 day																			X												MS/MSD
SL-1180-SA5A-SB-3.0-4.0	6/17/13 09:35	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X								X										
SL-1180-SA5A-SB-3.0-4.0	6/17/13 09:35	SO	None	2 - Encore	10 day																			X												
SL-823-SA5A-SB-0.0-0.5	6/17/13 10:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-823-SA5A-SB-0.0-0.5	6/17/13 10:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-825-SA5A-SB-0.0-0.5	6/17/13 11:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-825-SA5A-SB-0.0-0.5	6/17/13 11:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-822-SA5A-SB-0.0-0.5	6/17/13 14:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-822-SA5A-SB-0.0-0.5	6/17/13 14:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-824-SA5A-SB-0.0-0.5	6/17/13 13:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-824-SA5A-SB-0.0-0.5	6/17/13 13:45	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: V. C...

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
~~Stephanie Myers~~	6/17/2013	1600									
									C Esle	6/18/13	0940

COC Rev 2

COC: 20130617-01, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1397820

Client/Project: CDM Smith

Date of Receipt: 6/18/13

Time of Receipt: 0940

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: ∅

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 6/18/13 1033

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 02, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/19/2013
Group Number: 1398132
SDG: PH059
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-061813 Water	7097884
SL-854-SA5A-SB-0.0-0.5 Soil	7097885
SL-854-SA5A-SB-4.0-5.0 Soil	7097886
SL-855-SA5A-SB-0.0-0.5 Soil	7097887
SL-860-SA5A-SB-0.0-0.5 Soil	7097888
SL-860-SA5A-SB-4.0-5.0 Soil	7097889
SL-860-SA5A-SB-10.5-11.5 Soil	7097890
SL-864-SA5A-SB-0.0-0.5 Soil	7097891
SL-864-SA5A-SB-4.0-5.0 Soil	7097892

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-061813 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7097884
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 08:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59-TB SDG#: PH059-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 14:17	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 14:17	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	3.3		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.5	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.8		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.96	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	140		19	6.2	1
12969	Phenanthrene	85-01-8	1.0	J	1.7	0.69	1
12969	Pyrene	129-00-0	1.5	J	1.7	0.69	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	6.9		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	17		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	2.00	J	4.07	0.712	1
06946	Barium	7440-39-3	95.0		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.511	J	1.02	0.0682	1
07914	Boron	7440-42-8	3.69	J	10.2	0.855	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0773	1
01650	Calcium	7440-70-2	1,930		20.4	3.40	1
06951	Chromium	7440-47-3	20.4		3.05	0.163	1
06952	Cobalt	7440-48-4	4.89		1.02	0.101	1
06953	Copper	7440-50-8	9.87		2.04	0.295	1
01654	Iron	7439-89-6	18,300		40.7	3.68	1
06955	Lead	7439-92-1	6.19		3.05	0.509	1
01656	Lithium	7439-93-2	18.6		4.1	0.35	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,700		10.2	1.70	1
06958	Manganese	7439-96-5	313		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.470	J	2.04	0.173	1
06961	Nickel	7440-02-0	11.8		2.04	0.132	1
10145	Phosphorus	7723-14-0	348		10.2	2.94	1
01662	Potassium	7440-09-7	3,400		102	8.49	1
01667	Sodium	7440-23-5	81.0	J	102	17.0	1
06969	Tin	7440-31-5	2.19	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,070		1.02	0.173	1
06971	Vanadium	7440-62-2	32.5		1.02	0.132	1
06972	Zinc	7440-66-6	49.1		4.07	0.204	1
10146	Zirconium	7440-67-7	1.74	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.169	J	0.407	0.102	2
06142	Silver	7440-22-4	0.0548	J	0.204	0.0265	2
06144	Strontium	7440-24-6	27.4		0.407	0.0529	2
06145	Thallium	7440-28-0	0.343		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.03		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.992	U	0.992	0.0334	1
11031	12378-PeCDD	40321-76-4	0.255	JBQ	4.96	0.0499	1
11031	123478-HxCDD	39227-28-6	0.260	JBQ	4.96	0.0686	1
11031	123678-HxCDD	57653-85-7	0.840	JB	4.96	0.0720	1
11031	123789-HxCDD	19408-74-3	0.910	JB	4.96	0.0669	1
11031	1234678-HpCDD	35822-46-9	19.1	B	4.96	0.0775	1
11031	OCDD	3268-87-9	432	B	9.92	0.0545	1
11031	2378-TCDF	51207-31-9	0.132	JBQ	0.992	0.0418	1
11031	12378-PeCDF	57117-41-6	0.394	JB	4.96	0.0329	1
11031	23478-PeCDF	57117-31-4	0.131	JB	4.96	0.0327	1
11031	123478-HxCDF	70648-26-9	0.172	JB	4.96	0.0331	1
11031	123678-HxCDF	57117-44-9	0.142	JB	4.96	0.0301	1
11031	123789-HxCDF	72918-21-9	0.322	JBQ	4.96	0.0360	1
11031	234678-HxCDF	60851-34-5	0.205	JBQ	4.96	0.0298	1
11031	1234678-HpCDF	67562-39-4	1.96	JB	4.96	0.0258	1
11031	1234789-HpCDF	55673-89-7	0.166	JBQ	4.96	0.0366	1
11031	OCDF	39001-02-0	7.00	JB	9.92	0.0439	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.600				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 11:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 10:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 16:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:47	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:25	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:25	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:25	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:25	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097885
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 09:45 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85400 SDG#: PH059-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.32
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,400		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	4.93		4.00	0.700	1
06946	Barium	7440-39-3	58.5		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.383	J	1.00	0.0670	1
07914	Boron	7440-42-8	2.07	J	10.0	0.840	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0760	1
01650	Calcium	7440-70-2	2,650		20.0	3.34	1
06951	Chromium	7440-47-3	22.9		3.00	0.160	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.33		1.00	0.0990	1
06953	Copper	7440-50-8	9.16		2.00	0.290	1
01654	Iron	7439-89-6	21,600		40.0	3.62	1
06955	Lead	7439-92-1	3.90		3.00	0.500	1
01656	Lithium	7439-93-2	21.1		4.0	0.34	1
01657	Magnesium	7439-95-4	5,060		10.0	1.67	1
06958	Manganese	7439-96-5	238		1.00	0.0830	1
06960	Molybdenum	7439-98-7	0.360	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.9		2.00	0.130	1
10145	Phosphorus	7723-14-0	396		10.0	2.89	1
01662	Potassium	7440-09-7	2,250		100	8.34	1
01667	Sodium	7440-23-5	158		100	16.7	1
06969	Tin	7440-31-5	2.28	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,290		1.00	0.170	1
06971	Vanadium	7440-62-2	41.3		1.00	0.130	1
06972	Zinc	7440-66-6	54.1		4.00	0.200	1
10146	Zirconium	7440-67-7	5.00	U	5.00	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.160	J	0.400	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0260	2
06144	Strontium	7440-24-6	18.4		0.400	0.0520	2
06145	Thallium	7440-28-0	0.295		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.72		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0248	1
11031	12378-PeCDD	40321-76-4	0.0597 JBQ	5.10	0.0362	1
11031	123478-HxCDD	39227-28-6	5.10 U	5.10	0.0229	1
11031	123678-HxCDD	57653-85-7	5.10 U	5.10	0.0247	1
11031	123789-HxCDD	19408-74-3	5.10 U	5.10	0.0256	1
11031	1234678-HpCDD	35822-46-9	0.0890 JBQ	5.10	0.0246	1
11031	OCDD	3268-87-9	0.363 JB	10.2	0.0284	1
11031	2378-TCDF	51207-31-9	1.02 U	1.02	0.0268	1
11031	12378-PeCDF	57117-41-6	0.0434 JBQ	5.10	0.0202	1
11031	23478-PeCDF	57117-31-4	5.10 U	5.10	0.0192	1
11031	123478-HxCDF	70648-26-9	0.0233 JBQ	5.10	0.0113	1
11031	123678-HxCDF	57117-44-9	0.0179 JBQ	5.10	0.0106	1
11031	123789-HxCDF	72918-21-9	0.0304 JBQ	5.10	0.0132	1
11031	234678-HxCDF	60851-34-5	0.0173 JBQ	5.10	0.00967	1
11031	1234678-HpCDF	67562-39-4	0.0304 JBQ	5.10	0.00967	1
11031	1234789-HpCDF	55673-89-7	0.0215 JBQ	5.10	0.0151	1
11031	OCDF	39001-02-0	0.104 JB	10.2	0.0348	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000104			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 12:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/21/2013 21:34	Laura M Krieger	24.32
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317031458	06/19/2013 14:43	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317031458	06/19/2013 14:42	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 08:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 17:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:51	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:27	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:27	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:27	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-854-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097886
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85440 SDG#: PH059-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:27	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.44	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.86	J	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.4	J	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	5.4		1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.3	1
12969	Benzo(g,h,i)perylene	191-24-2	0.77	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.4	J	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	3.7		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	7.0	J	18	6.0	1
12969	Fluoranthene	206-44-0	3.4		1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	J	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.7	0.67	1
12969	Naphthalene	91-20-3	1.4	J	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	170		18	6.0	1
12969	Phenanthrene	85-01-8	1.8		1.7	0.67	1
12969	Pyrene	129-00-0	2.9		1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	9.0		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	23		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		39.3	7.09	1
06944	Antimony	7440-36-0	3.93	U	3.93	0.727	1
06935	Arsenic	7440-38-2	2.39	J	3.93	0.688	1
06946	Barium	7440-39-3	112		0.983	0.0324	1
06947	Beryllium	7440-41-7	0.564	J	0.983	0.0658	1
07914	Boron	7440-42-8	4.50	J	9.83	0.825	1
06949	Cadmium	7440-43-9	0.983	U	0.983	0.0747	1
01650	Calcium	7440-70-2	2,380		19.7	3.28	1
06951	Chromium	7440-47-3	21.0		2.95	0.157	1
06952	Cobalt	7440-48-4	5.77		0.983	0.0973	1
06953	Copper	7440-50-8	10.7		1.97	0.285	1
01654	Iron	7439-89-6	20,600		39.3	3.56	1
06955	Lead	7439-92-1	11.6		2.95	0.491	1
01656	Lithium	7439-93-2	20.3		3.9	0.33	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,020		9.83	1.64	1
06958	Manganese	7439-96-5	364		0.983	0.0816	1
06960	Molybdenum	7439-98-7	0.529	J	1.97	0.167	1
06961	Nickel	7440-02-0	13.4		1.97	0.128	1
10145	Phosphorus	7723-14-0	425		9.83	2.84	1
01662	Potassium	7440-09-7	3,810		98.3	8.20	1
01667	Sodium	7440-23-5	74.4	J	98.3	16.4	1
06969	Tin	7440-31-5	2.66	J	9.83	0.216	1
06970	Titanium	7440-32-6	1,190		0.983	0.167	1
06971	Vanadium	7440-62-2	37.4		0.983	0.128	1
06972	Zinc	7440-66-6	59.8		3.93	0.197	1
10146	Zirconium	7440-67-7	1.32	J	4.91	0.825	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.153	J	0.393	0.0983	2
06142	Silver	7440-22-4	0.0785	J	0.197	0.0255	2
06144	Strontium	7440-24-6	28.0		0.393	0.0511	2
06145	Thallium	7440-28-0	0.326		0.197	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0122	J	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.03		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0416	JBQ	1.01	0.0400	1
11031	12378-PeCDD	40321-76-4	5.03	U	5.03	0.0663	1
11031	123478-HxCDD	39227-28-6	0.487	JB	5.03	0.0802	1
11031	123678-HxCDD	57653-85-7	1.88	JB	5.03	0.0858	1
11031	123789-HxCDD	19408-74-3	1.77	JBQ	5.03	0.0901	1
11031	1234678-HpCDD	35822-46-9	49.4	B	5.03	0.115	1
11031	OCDD	3268-87-9	1,270	B	10.1	0.0762	1
11031	2378-TCDF	51207-31-9	0.215	JB	1.01	0.0641	1
11031	12378-PeCDF	57117-41-6	0.480	JB	5.03	0.0373	1
11031	23478-PeCDF	57117-31-4	0.461	JBQ	5.03	0.0374	1
11031	123478-HxCDF	70648-26-9	0.316	JB	5.03	0.0381	1
11031	123678-HxCDF	57117-44-9	0.276	JB	5.03	0.0371	1
11031	123789-HxCDF	72918-21-9	0.335	JB	5.03	0.0432	1
11031	234678-HxCDF	60851-34-5	0.317	JBQ	5.03	0.0353	1
11031	1234678-HpCDF	67562-39-4	4.25	JB	5.03	0.0306	1
11031	1234789-HpCDF	55673-89-7	0.286	JBQ	5.03	0.0471	1
11031	OCDF	39001-02-0	13.2	B	10.1	0.0463	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.29				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 12:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 12:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 18:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:55	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:29	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:29	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:29	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:29	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-855-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097887
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 10:30 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85500 SDG#: PH059-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.85	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	5.4		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	4.3		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.6	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	2.0		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	98		18	6.1	1
12969	Phenanthrene	85-01-8	1.9		1.7	0.68	1
12969	Pyrene	129-00-0	1.7	J	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	5.2	J	10	4.1	2
12952	EFH (C21-C30)	n.a.	19		10	4.1	2
12952	EFH (C30-C40)	n.a.	34		21	8.2	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	2.91	J	3.99	0.698	1
06946	Barium	7440-39-3	126		0.998	0.0329	1
06947	Beryllium	7440-41-7	0.624	J	0.998	0.0669	1
07914	Boron	7440-42-8	5.63	J	9.98	0.838	1
06949	Cadmium	7440-43-9	0.998	U	0.998	0.0758	1
01650	Calcium	7440-70-2	2,660		20.0	3.33	1
06951	Chromium	7440-47-3	23.6		2.99	0.160	1
06952	Cobalt	7440-48-4	6.19		0.998	0.0988	1
06953	Copper	7440-50-8	12.0		2.00	0.289	1
01654	Iron	7439-89-6	21,700		39.9	3.61	1
06955	Lead	7439-92-1	8.28		2.99	0.499	1
01656	Lithium	7439-93-2	23.0		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,380		9.98	1.67	1
06958	Manganese	7439-96-5	401		0.998	0.0828	1
06960	Molybdenum	7439-98-7	0.482	J	2.00	0.170	1
06961	Nickel	7440-02-0	15.5		2.00	0.130	1
10145	Phosphorus	7723-14-0	437		9.98	2.88	1
01662	Potassium	7440-09-7	4,200		99.8	8.32	1
01667	Sodium	7440-23-5	81.2	J	99.8	16.7	1
06969	Tin	7440-31-5	2.46	J	9.98	0.220	1
06970	Titanium	7440-32-6	1,310		0.998	0.170	1
06971	Vanadium	7440-62-2	39.4		0.998	0.130	1
06972	Zinc	7440-66-6	59.4		3.99	0.200	1
10146	Zirconium	7440-67-7	4.99	U	4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.175	J	0.399	0.0998	2
06142	Silver	7440-22-4	0.0661	J	0.200	0.0259	2
06144	Strontium	7440-24-6	26.9		0.399	0.0519	2
06145	Thallium	7440-28-0	0.352		0.200	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0102	J	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.15		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0372	1
11031	12378-PeCDD	40321-76-4	5.10	U	5.10	0.0517	1
11031	123478-HxCDD	39227-28-6	0.169	JB	5.10	0.0522	1
11031	123678-HxCDD	57653-85-7	0.541	JB	5.10	0.0582	1
11031	123789-HxCDD	19408-74-3	0.537	JBQ	5.10	0.0541	1
11031	1234678-HpCDD	35822-46-9	9.29	B	5.10	0.0566	1
11031	OCDD	3268-87-9	168	B	10.2	0.0468	1
11031	2378-TCDF	51207-31-9	0.211	JB	1.02	0.0471	1
11031	12378-PeCDF	57117-41-6	0.424	JB	5.10	0.0299	1
11031	23478-PeCDF	57117-31-4	0.246	JBQ	5.10	0.0283	1
11031	123478-HxCDF	70648-26-9	0.0852	JB	5.10	0.0259	1
11031	123678-HxCDF	57117-44-9	0.0996	JBQ	5.10	0.0235	1
11031	123789-HxCDF	72918-21-9	0.260	JB	5.10	0.0281	1
11031	234678-HxCDF	60851-34-5	0.103	JBQ	5.10	0.0233	1
11031	1234678-HpCDF	67562-39-4	1.13	JB	5.10	0.0332	1
11031	1234789-HpCDF	55673-89-7	0.109	JBQ	5.10	0.0439	1
11031	OCDF	39001-02-0	3.80	JB	10.2	0.0336	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.295				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 13:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 22:31	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 19:33	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 12:59	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:32	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:32	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:32	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:32	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:18	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097888
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:40 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86000 SDG#: PH059-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	0.97	J	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	0.93	J	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.1	J	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.18
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	2.4	J	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,700		42.0	7.57	1
06944	Antimony	7440-36-0	4.20	U	4.20	0.777	1
06935	Arsenic	7440-38-2	5.03		4.20	0.735	1
06946	Barium	7440-39-3	107		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.809	J	1.05	0.0703	1
07914	Boron	7440-42-8	5.34	J	10.5	0.882	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0798	1
01650	Calcium	7440-70-2	2,880		21.0	3.51	1
06951	Chromium	7440-47-3	29.9		3.15	0.168	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	11.4		1.05	0.104	1
06953	Copper	7440-50-8	13.8		2.10	0.304	1
01654	Iron	7439-89-6	29,200		210	19.0	5
06955	Lead	7439-92-1	8.52		3.15	0.525	1
01656	Lithium	7439-93-2	32.2		4.2	0.36	1
01657	Magnesium	7439-95-4	6,060		10.5	1.75	1
06958	Manganese	7439-96-5	378		1.05	0.0871	1
06960	Molybdenum	7439-98-7	0.772	J	2.10	0.178	1
06961	Nickel	7440-02-0	16.1		2.10	0.136	1
10145	Phosphorus	7723-14-0	231		10.5	3.03	1
01662	Potassium	7440-09-7	2,180		105	8.75	1
01667	Sodium	7440-23-5	121		105	17.5	1
06969	Tin	7440-31-5	3.03	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,420		1.05	0.178	1
06971	Vanadium	7440-62-2	53.1		1.05	0.136	1
06972	Zinc	7440-66-6	59.0		4.20	0.210	1
10146	Zirconium	7440-67-7	1.53	J	5.25	0.882	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.111	J	0.420	0.105	2
06142	Silver	7440-22-4	0.0416	J	0.210	0.0273	2
06144	Strontium	7440-24-6	38.8		0.420	0.0546	2
06145	Thallium	7440-28-0	0.375		0.210	0.0315	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177	U	0.0177	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.25		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0349	1
11031	12378-PeCDD	40321-76-4	5.31	U	5.31	0.0388	1
11031	123478-HxCDD	39227-28-6	0.0343	JBQ	5.31	0.0271	1
11031	123678-HxCDD	57653-85-7	0.0526	JBQ	5.31	0.0290	1
11031	123789-HxCDD	19408-74-3	0.0530	JBQ	5.31	0.0279	1
11031	1234678-HpCDD	35822-46-9	1.16	JBQ	5.31	0.0468	1
11031	OCDD	3268-87-9	21.3	B	10.6	0.0287	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0317	1
11031	12378-PeCDF	57117-41-6	0.0751	JB	5.31	0.0256	1
11031	23478-PeCDF	57117-31-4	5.31	U	5.31	0.0244	1
11031	123478-HxCDF	70648-26-9	0.0319	JBQ	5.31	0.0148	1
11031	123678-HxCDF	57117-44-9	0.0340	JBQ	5.31	0.0126	1
11031	123789-HxCDF	72918-21-9	0.0262	JBQ	5.31	0.0157	1
11031	234678-HxCDF	60851-34-5	0.0346	JB	5.31	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.203	JB	5.31	0.0146	1
11031	1234789-HpCDF	55673-89-7	0.0288	JBQ	5.31	0.0212	1
11031	OCDF	39001-02-0	0.421	JB	10.6	0.0309	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0142				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 14:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 04:32	Laura M Krieger	24.18
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317031458	06/19/2013 14:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317031458	06/19/2013 14:41	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 09:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 20:29	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 13:35	Eric L Eby	5
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 13:03	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:34	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:34	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:34	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097889
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 12:50 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86040 SDG#: PH059-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:34	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.2
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,000		40.5	7.29	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	2.57	J	4.05	0.708	1
06946	Barium	7440-39-3	46.6		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.418	J	1.01	0.0678	1
07914	Boron	7440-42-8	2.45	J	10.1	0.850	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0769	1
01650	Calcium	7440-70-2	1,520		20.2	3.38	1
06951	Chromium	7440-47-3	14.9		3.04	0.162	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	2.29		1.01	0.100	1
06953	Copper	7440-50-8	6.08		2.02	0.293	1
01654	Iron	7439-89-6	15,500		40.5	3.66	1
06955	Lead	7439-92-1	3.32		3.04	0.506	1
01656	Lithium	7439-93-2	18.1		4.0	0.34	1
01657	Magnesium	7439-95-4	3,270		10.1	1.69	1
06958	Manganese	7439-96-5	139		1.01	0.0840	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.172	1
06961	Nickel	7440-02-0	6.01		2.02	0.132	1
10145	Phosphorus	7723-14-0	102		10.1	2.92	1
01662	Potassium	7440-09-7	1,290		101	8.44	1
01667	Sodium	7440-23-5	123		101	16.9	1
06969	Tin	7440-31-5	2.39	J	10.1	0.223	1
06970	Titanium	7440-32-6	997		1.01	0.172	1
06971	Vanadium	7440-62-2	27.6		1.01	0.132	1
06972	Zinc	7440-66-6	32.5		4.05	0.202	1
10146	Zirconium	7440-67-7	1.02	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.249		0.202	0.0263	2
06144	Strontium	7440-24-6	21.2		0.405	0.0526	2
06145	Thallium	7440-28-0	0.246		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0291		0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.43		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.996	U	0.996	0.0320	1
11031	12378-PeCDD	40321-76-4	0.109	JBQ	4.98	0.0427	1
11031	123478-HxCDD	39227-28-6	0.0426	JB	4.98	0.0218	1
11031	123678-HxCDD	57653-85-7	4.98	U	4.98	0.0234	1
11031	123789-HxCDD	19408-74-3	0.0399	JBQ	4.98	0.0239	1
11031	1234678-HpCDD	35822-46-9	0.125	JB	4.98	0.0265	1
11031	OCDD	3268-87-9	0.351	JBQ	9.96	0.0268	1
11031	2378-TCDF	51207-31-9	0.996	U	0.996	0.0301	1
11031	12378-PeCDF	57117-41-6	0.100	JB	4.98	0.0219	1
11031	23478-PeCDF	57117-31-4	0.0751	JBQ	4.98	0.0214	1
11031	123478-HxCDF	70648-26-9	0.0517	JBQ	4.98	0.0154	1
11031	123678-HxCDF	57117-44-9	0.0619	JBQ	4.98	0.0146	1
11031	123789-HxCDF	72918-21-9	0.0803	JB	4.98	0.0182	1
11031	234678-HxCDF	60851-34-5	0.0445	JB	4.98	0.0135	1
11031	1234678-HpCDF	67562-39-4	0.0546	JBQ	4.98	0.0135	1
11031	1234789-HpCDF	55673-89-7	0.0523	JBQ	4.98	0.0194	1
11031	OCDF	39001-02-0	0.195	JBQ	9.96	0.0347	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0209				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 14:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 05:10	Laura M Krieger	25.2
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317031458	06/19/2013 14:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317031458	06/19/2013 14:39	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 08:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 21:26	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 13:08	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:44	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:44	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:44	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097890
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:00 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86011 SDG#: PH059-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:44	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	7.7		1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.60	J	1.7	0.34	1
12969	Anthracene	120-12-7	18		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	36		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	26		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	27		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	18		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	9.3		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	17		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	49		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	3.3		1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	38		18	6.1	1
12969	Fluoranthene	206-44-0	99		1.7	0.68	1
12969	Fluorene	86-73-7	5.8		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	9.1		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.4	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	2.3		1.7	0.68	1
12969	Naphthalene	91-20-3	2.8		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	85		1.7	0.68	1
12969	Pyrene	129-00-0	100		1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.3	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	30		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	72		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,300		41.0	7.39	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.758	1
06935	Arsenic	7440-38-2	3.24	J	4.10	0.717	1
06946	Barium	7440-39-3	113		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.614	J	1.02	0.0686	1
07914	Boron	7440-42-8	4.70	J	10.2	0.861	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0779	1
01650	Calcium	7440-70-2	3,330		20.5	3.42	1
06951	Chromium	7440-47-3	23.5		3.07	0.164	1
06952	Cobalt	7440-48-4	6.25		1.02	0.101	1
06953	Copper	7440-50-8	11.9		2.05	0.297	1
01654	Iron	7439-89-6	22,700		41.0	3.71	1
06955	Lead	7439-92-1	14.6		3.07	0.512	1
01656	Lithium	7439-93-2	24.3		4.1	0.35	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,820		10.2	1.71	1
06958	Manganese	7439-96-5	363		1.02	0.0850	1
06960	Molybdenum	7439-98-7	0.552	J	2.05	0.174	1
06961	Nickel	7440-02-0	14.6		2.05	0.133	1
10145	Phosphorus	7723-14-0	482		10.2	2.96	1
01662	Potassium	7440-09-7	4,010		102	8.55	1
01667	Sodium	7440-23-5	80.0	J	102	17.1	1
06969	Tin	7440-31-5	2.94	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,280		1.02	0.174	1
06971	Vanadium	7440-62-2	41.1		1.02	0.133	1
06972	Zinc	7440-66-6	88.2		4.10	0.205	1
10146	Zirconium	7440-67-7	5.12	U	5.12	0.861	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.128	J	0.410	0.102	2
06142	Silver	7440-22-4	0.0674	J	0.205	0.0266	2
06144	Strontium	7440-24-6	27.5		0.410	0.0533	2
06145	Thallium	7440-28-0	0.309		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0143	J	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.61		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0496	1
11031	12378-PeCDD	40321-76-4	0.658	JBQ	5.03	0.0852	1
11031	123478-HxCDD	39227-28-6	1.22	JB	5.03	0.103	1
11031	123678-HxCDD	57653-85-7	2.95	JB	5.03	0.115	1
11031	123789-HxCDD	19408-74-3	2.42	JB	5.03	0.108	1
11031	1234678-HpCDD	35822-46-9	71.3	B	5.03	0.112	1
11031	OCDD	3268-87-9	1,120	B	10.1	0.0920	1
11031	2378-TCDF	51207-31-9	0.411	JB	1.01	0.0667	1
11031	12378-PeCDF	57117-41-6	0.745	JB	5.03	0.0488	1
11031	23478-PeCDF	57117-31-4	0.870	JB	5.03	0.0436	1
11031	123478-HxCDF	70648-26-9	0.555	JBQ	5.03	0.0450	1
11031	123678-HxCDF	57117-44-9	0.468	JBQ	5.03	0.0445	1
11031	123789-HxCDF	72918-21-9	0.365	JBQ	5.03	0.0480	1
11031	234678-HxCDF	60851-34-5	0.514	JBQ	5.03	0.0424	1
11031	1234678-HpCDF	67562-39-4	7.32	B	5.03	0.0427	1
11031	1234789-HpCDF	55673-89-7	0.473	JB	5.03	0.0548	1
11031	OCDF	39001-02-0	16.7	B	10.1	0.0546	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.12				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	94	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	98	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	89	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/29/2013 02:33	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 14:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 22:23	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 13:39	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:46	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:46	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:46	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:46	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097891
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 13:55 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86400 SDG#: PH059-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	0.42	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	0.72	J	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	0.82	J	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.84
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,300		41.7	7.51	1
06944	Antimony	7440-36-0	0.786	J	4.17	0.771	1
06935	Arsenic	7440-38-2	4.53		4.17	0.729	1
06946	Barium	7440-39-3	93.6		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.585	J	1.04	0.0698	1
07914	Boron	7440-42-8	3.63	J	10.4	0.875	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0792	1
01650	Calcium	7440-70-2	2,710		20.8	3.48	1
06951	Chromium	7440-47-3	45.8		3.13	0.167	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.07		1.04	0.103	1
06953	Copper	7440-50-8	10.4		2.08	0.302	1
01654	Iron	7439-89-6	25,200		41.7	3.77	1
06955	Lead	7439-92-1	7.53		3.13	0.521	1
01656	Lithium	7439-93-2	23.0		4.2	0.35	1
01657	Magnesium	7439-95-4	5,650		10.4	1.74	1
06958	Manganese	7439-96-5	216		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.566	J	2.08	0.177	1
06961	Nickel	7440-02-0	22.9		2.08	0.135	1
10145	Phosphorus	7723-14-0	216		10.4	3.01	1
01662	Potassium	7440-09-7	1,940		104	8.69	1
01667	Sodium	7440-23-5	95.6	J	104	17.4	1
06969	Tin	7440-31-5	2.95	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,330		1.04	0.177	1
06971	Vanadium	7440-62-2	52.9		1.04	0.135	1
06972	Zinc	7440-66-6	53.0		4.17	0.208	1
10146	Zirconium	7440-67-7	1.11	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.149	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0294	J	0.208	0.0271	2
06144	Strontium	7440-24-6	27.4		0.417	0.0542	2
06145	Thallium	7440-28-0	0.259		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.38		0.0100	0.0100	1
	The pH was measured in water at 22.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0504 JBQ	1.06	0.0382	1
11031	12378-PeCDD	40321-76-4	0.139 JBQ	5.30	0.0506	1
11031	123478-HxCDD	39227-28-6	0.0574 JBQ	5.30	0.0458	1
11031	123678-HxCDD	57653-85-7	0.130 JBQ	5.30	0.0503	1
11031	123789-HxCDD	19408-74-3	0.245 JBQ	5.30	0.0458	1
11031	1234678-HpCDD	35822-46-9	1.67 JB	5.30	0.0634	1
11031	OCDD	3268-87-9	23.4 B	10.6	0.0447	1
11031	2378-TCDF	51207-31-9	1.06 U	1.06	0.0312	1
11031	12378-PeCDF	57117-41-6	0.186 JBQ	5.30	0.0273	1
11031	23478-PeCDF	57117-31-4	0.0543 JBQ	5.30	0.0279	1
11031	123478-HxCDF	70648-26-9	0.0715 JBQ	5.30	0.0185	1
11031	123678-HxCDF	57117-44-9	0.0764 JB	5.30	0.0168	1
11031	123789-HxCDF	72918-21-9	0.0499 JB	5.30	0.0194	1
11031	234678-HxCDF	60851-34-5	0.0624 JBQ	5.30	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.224 JBQ	5.30	0.0229	1
11031	1234789-HpCDF	55673-89-7	5.30 U	5.30	0.0299	1
11031	OCDF	39001-02-0	0.401 JB	10.6	0.0421	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0364			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	67	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13178SLA026	06/28/2013 15:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	2	13178SLA026	06/27/2013 13:30	Wanda F Oswald	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 05:48	Laura M Krieger	27.84
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317031458	06/19/2013 14:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317031458	06/19/2013 14:37	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 10:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175001	06/27/2013 23:20	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13175001	06/24/2013 13:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06946	Barium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
07914	Boron	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06953	Copper	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01654	Iron	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06955	Lead	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06969	Tin	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	131710637001	06/27/2013 13:28	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	131710637001B	06/27/2013 11:49	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131710637001A	06/27/2013 11:49	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131710637001A	06/27/2013 11:49	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-864-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7097892
LL Group # 1398132
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/18/2013 14:10 by VC

Submitted: 06/19/2013 09:05
Reported: 07/02/2013 11:53

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86440 SDG#: PH059-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131710637001A	06/27/2013 11:49	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131710638001	06/25/2013 12:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131710637001	06/26/2013 23:50	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131710638001	06/25/2013 02:50	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13170039402A	06/19/2013 20:20	Clayton C Litchmore	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402A	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13178SLA026	Sample number(s): 7097885-7097892									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	98		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	94		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	97		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	97		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	97		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	98		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	106		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	98		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	97		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	105		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	100		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	97		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	98		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	100		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	99		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	87		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	110		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	96		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	101		71-120		
Batch number: 13172A16A	Sample number(s): 7097886,7097889-7097890,7097892									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	85		67-119		
Batch number: 13173A94A	Sample number(s): 7097884									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	95	75-135	8	30
Batch number: 131730016A	Sample number(s): 7097885-7097892									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	107		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	100		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	82		49-107		
Batch number: 131710637001	Sample number(s): 7097885-7097892									
Aluminum	40.0	U	40.0	7.21	mg/kg	97		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	97		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	4.00 U	4.00	0.700	mg/kg	94		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	93		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	93		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	89		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	93		80-120		
Calcium	5.59 J	20.0	3.34	mg/kg	96		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	94		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	94		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	91		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	96		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	93		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	97		80-120		
Magnesium	10.0 U	10.0	1.67	mg/kg	94		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	91		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	92		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	95		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	94		80-120		
Potassium	100 U	100.	8.34	mg/kg	94		80-120		
Sodium	100 U	100.	16.7	mg/kg	94		80-120		
Tin	1.44 J	10.0	0.220	mg/kg	93		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	93		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	95		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	95		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	96		80-120		
Batch number: 131710637001A	Sample number(s): 7097885-7097892								
Silver	0.200 U	0.200	0.0260	mg/kg	102		80-120		
Strontium	0.400 U	0.400	0.0520	mg/kg	107		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	112		80-120		
Batch number: 131710637001B	Sample number(s): 7097885-7097892								
Selenium	0.400 U	0.400	0.100	mg/kg	112		80-120		
Batch number: 131710638001	Sample number(s): 7097885-7097892								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	89		85-120		
Batch number: 13170039402A	Sample number(s): 7097885-7097892								
15a pH by 9045D					99		95-105		
Batch number: 13176162402A	Sample number(s): 7097885-7097892								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13175001	Sample number(s): 7097885-7097892								
2378-TCDD	0.0415 J	1.00	0.0363	ng/kg	90		67-158		
12378-PeCDD	0.0611 J	5.00	0.0484	ng/kg	94		70-142		
123478-HxCDD	0.0308 J	5.00	0.0258	ng/kg	92		70-164		
123678-HxCDD	0.0519 J	5.00	0.0279	ng/kg	92		76-134		
123789-HxCDD	0.0471 J	5.00	0.0259	ng/kg	90		64-162		
1234678-HpCDD	0.0996 J	5.00	0.0285	ng/kg	88		70-140		
OCDD	0.326 J	10.0	0.0520	ng/kg	90		78-144		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
2378-TCDF	0.0358 J	1.00	0.0342	ng/kg	91		75-158		
12378-PeCDF	0.0700 J	5.00	0.0304	ng/kg	91		80-134		
23478-PeCDF	0.0563 J	5.00	0.0299	ng/kg	94		68-160		
123478-HxCDF	0.0286 J	5.00	0.0150	ng/kg	91		72-134		
123678-HxCDF	0.0359 J	5.00	0.0143	ng/kg	92		84-130		
123789-HxCDF	0.0245 J	5.00	0.0178	ng/kg	89		78-130		
234678-HxCDF	0.0262 J	5.00	0.0141	ng/kg	89		70-156		
1234678-HpCDF	0.0351 J	5.00	0.00870	ng/kg	89		82-122		
1234789-HpCDF	0.0615 J	5.00	0.0137	ng/kg	87		78-138		
OCDF	0.0789 J	10.0	0.0538	ng/kg	87		63-170		
TEQ WHO 2005 - EDLx0.0	0.00890			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13178SLA026	Sample number(s): 7097885-7097892 UNSPK: P096473								
Acenaphthene	105	102	48-127	3	30				
Acenaphthylene	97	93	49-121	5	30				
Anthracene	99	93	52-126	6	30				
Benzo(a)anthracene	97	92	32-135	5	30				
Benzo(a)pyrene	95	88	36-138	8	30				
Benzo(b)fluoranthene	108	95	26-142	12	30				
Benzo(e)pyrene	94	89	70-130	6	30				
Benzo(g,h,i)perylene	97	90	33-141	8	30				
Benzo(k)fluoranthene	96	97	47-129	1	30				
Butylbenzylphthalate	114	112	59-153	1	30				
Di-n-butylphthalate	118	114	62-154	4	30				
Chrysene	99	94	29-148	5	30				
Dibenz(a,h)anthracene	98	92	34-125	7	30				
Diethylphthalate	115	111	76-127	4	30				
Dimethylphthalate	99	98	62-136	1	30				
Bis(2-Ethylhexyl)phthalate	112	109	39-167	3	30				
Fluoranthene	102	97	47-135	5	30				
Fluorene	97	95	50-129	2	30				
Indeno(1,2,3-cd)pyrene	98	91	17-136	7	30				
1-Methylnaphthalene	106	103	50-131	3	30				
2-Methylnaphthalene	103	100	28-144	3	30				
Naphthalene	100	98	31-148	2	30				
N-Nitrosodimethylamine	92	91	48-113	2	30				
Di-n-octylphthalate	117	114	52-162	3	30				
Phenanthrene	97	95	29-142	2	30				
Pyrene	103	98	26-143	4	30				
Batch number: 13172A16A	Sample number(s): 7097886,7097889-7097890,7097892 UNSPK: P096473								
11a TPH by EPA 8015B GRO	102	91	39-118	4	30				

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 131730016A	Sample number(s): 7097885-7097892 UNSPK: 7097885								
EFH (C12-C14)	83	92	49-123	11	20				
EFH (C15-C20)	115	134*	49-123	15	20				
EFH (C21-C30)	55	109	49-123	22*	20				
EFH (C30-C40)	100	237*	49-123	28*	20				
EFH (C8-C11)	68	78	49-123	14	20				
Batch number: 131710637001	Sample number(s): 7097885-7097892 UNSPK: P094789 BKG: P094789								
Aluminum	1018 (2)	-854 (2)	75-125	26*	20	14,100	13,000	9	20
Antimony	51*	42*	75-125	18	20	3.96 U	3.96 U	0 (1)	20
Arsenic	84	74*	75-125	10	20	1.98 J	2.13 J	7 (1)	20
Barium	90	65*	75-125	20	20	88.6	80.2	10	20
Beryllium	89	75	75-125	15	20	0.484 J	0.463 J	4 (1)	20
Boron	84	72*	75-125	15	20	4.12 J	3.94 J	5 (1)	20
Cadmium	76	70*	75-125	8	20	0.990 U	0.990 U	0 (1)	20
Calcium	110 (2)	-34 (2)	75-125	24*	20	2,230	2,010	10	20
Chromium	95	68*	75-125	15	20	18.9	17.7	7	20
Cobalt	80	70*	75-125	12	20	4.38	3.88	12 (1)	20
Copper	87	67*	75-125	18	20	9.21	8.90	3 (1)	20
Iron	-229 (2)	-4694 (2)	75-125	29*	20	17,900	17,400	3	20
Lead	88	74*	75-125	11	20	7.24	6.45	12 (1)	20
Lithium	84	59*	75-125	27*	20	19.5	18.1	7 (1)	20
Magnesium	90 (2)	-394 (2)	75-125	28*	20	3,770	3,560	6	20
Manganese	117 (2)	18 (2)	75-125	16	20	273	270	1	20
Molybdenum	80	70*	75-125	13	20	0.777 J	0.422 J	59* (1)	20
Nickel	82	69*	75-125	13	20	11.0	9.48	15 (1)	20
Phosphorus	89	28*	75-125	15	20	335	296	13	20
Potassium	102	-7*	75-125	27*	20	3,490	3,260	7	20
Sodium	83	62*	75-125	27*	20	75.2 J	67.1 J	11 (1)	20
Tin	76	67*	75-125	13	20	2.33 J	1.80 J	26* (1)	20
Titanium	274 (2)	75 (2)	75-125	16	20	1,090	977	11	20
Vanadium	97	72*	75-125	17	20	31.0	29.3	6	20
Zinc	87	63*	75-125	14	20	49.4	42.8	14	20
Zirconium	77	60*	75-125	25*	20	1.41 J	2.03 J	36* (1)	20
Batch number: 131710637001A	Sample number(s): 7097885-7097892 UNSPK: P094789 BKG: P094789								
Silver	111	129*	75-125	15	20	0.0579 J	0.0454 J	24* (1)	20
Strontium	115	173*	75-125	13	20	25.1	24.9	1	20
Thallium	101	116	75-125	7	20	0.334	0.312	7 (1)	20
Batch number: 131710637001B	Sample number(s): 7097885-7097892 UNSPK: P094789 BKG: P094789								
Selenium	105	118	75-125	11	20	0.163 J	0.176 J	8 (1)	20
Batch number: 131710638001	Sample number(s): 7097885-7097892 UNSPK: P094789 BKG: P094789								
3a Mercury 7471A	102	104	65-135	4	20	0.0160 U	0.0164 U	0 (1)	20
Batch number: 13170039402A	Sample number(s): 7097885-7097892 BKG: 7097886								
15a pH by 9045D						6.72	6.78	1	3

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13176162402A	Sample number(s): 7097885-7097892					BKG: 7097892			
14a Moisture Content by 160.3						6.8	6.7	1	20
Batch number: 13175001	Sample number(s): 7097885-7097892 UNSPK: P094789								
2378-TCDD	94	93	40-135	4	20				
12378-PeCDD	95	94	40-135	4	20				
123478-HxCDD	97	91	40-135	9	20				
123678-HxCDD	95	92	40-135	5	20				
123789-HxCDD	94	90	40-135	7	20				
1234678-HpCDD	215*	91	40-135	79*	20				
OCDD	324*	121	40-135	72*	20				
2378-TCDF	92	92	40-135	3	20				
12378-PeCDF	90	89	40-135	3	20				
23478-PeCDF	92	90	40-135	4	20				
123478-HxCDF	90	87	40-135	6	20				
123678-HxCDF	89	89	40-135	3	20				
123789-HxCDF	88	87	40-135	3	20				
234678-HxCDF	90	89	40-135	4	20				
1234678-HpCDF	89	88	40-135	3	20				
1234789-HpCDF	86	87	40-135	2	20				
OCDF	85	86	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13178SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7097885	82	85	96
7097886	87	94	102
7097887	86	90	103
7097888	83	88	98
7097889	86	92	101
7097890	72	81	84
7097891	79	82	96
7097892	87	95	102
Blank	87	94	101
LCS	85	93	100
MS	85	91	103
MSD	82	84	98
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Surrogate Quality Control

Batch number: 13172A16A

	Trifluorotoluene-F
7097886	89
7097889	84
7097890	85
7097892	77
Blank	90
LCS	87
MS	83
MSD	93
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13173A94A

	Trifluorotoluene-F
7097884	68
Blank	68
LCS	74
LCSD	81
Limits:	63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131730016A

	Chlorobenzene	Orthoterphenyl
7097885	87	93
7097886	94	98
7097887	84	88
7097888	83	111
7097889	88	93
7097890	85	92
7097891	87	101
7097892	96	98
Blank	95	85
LCS	97	94
MS	87	91
MSD	89	95
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13175001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7097885	73	73	75	81	82	78
7097886	73	70	70	76	81	71
7097887	71	68	72	77	76	72
7097888	71	74	72	76	79	75
7097889	67	69	70	76	76	71
7097890	74	74	71	77	80	72
7097891	85	86	85	88	90	89
7097892	66	68	67	70	73	71

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398132
Reported: 07/02/13 at 11:53 AM

Surrogate Quality Control

Blank	76	80	74	80	79	74
MS	69	72	68	74	79	71
MSD	80	77	69	73	78	73
OPR	75	80	73	76	78	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7097885	98	81	78	77	85	85
7097886	85	68	61	76	83	81
7097887	90	73	76	73	81	83
7097888	86	76	74	80	81	80
7097889	90	73	74	74	81	81
7097890	92	75	71	80	83	85
7097891	96	90	89	87	90	94
7097892	77	71	67	71	76	74
Blank	96	74	60	90	90	89
MS	84	72	65	79	85	87
MSD	86	70	61	83	86	87
OPR	87	76	63	90	86	86
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7097885	86	87	89	67	78
7097886	81	79	73	62	75
7097887	81	83	90	63	75
7097888	81	84	84	67	78
7097889	82	83	90	59	71
7097890	86	87	86	63	78
7097891	95	95	98	83	85
7097892	74	77	73	63	71
Blank	93	97	87	71	84
MS	87	91	90	67	76
MSD	88	90	85	68	82
OPR	89	93	83	70	84
Limits:	28-130	23-140	17-157	24-169	24-185

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13013/1398132/7097884-92

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/18/2013

CarrierName: FedEx

AirbillNo: 796032196537

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130618-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Formaldehyde 8315	Cyanide 9012	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-061813	6/18/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-854-SA5A-SB-0.0-0.5	6/18/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-854-SA5A-SB-0.0-0.5	6/18/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-854-SA5A-SB-4.0-5.0	6/18/13 10:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-854-SA5A-SB-4.0-5.0	6/18/13 10:00	SO	None	2 - Encore	10 day																			X												
SL-855-SA5A-SB-0.0-0.5	6/18/13 10:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-855-SA5A-SB-0.0-0.5	6/18/13 10:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-860-SA5A-SB-0.0-0.5	6/18/13 12:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-860-SA5A-SB-0.0-0.5	6/18/13 12:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-860-SA5A-SB-4.0-5.0	6/18/13 12:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-860-SA5A-SB-4.0-5.0	6/18/13 12:50	SO	None	2 - Encore	10 day																			X												
SL-860-SA5A-SB-10.5-11.5	6/18/13 13:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-860-SA5A-SB-10.5-11.5	6/18/13 13:00	SO	None	2 - Encore	10 day																			X												
SL-864-SA5A-SB-0.0-0.5	6/18/13 13:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-864-SA5A-SB-0.0-0.5	6/18/13 13:55	SO	None	1 - 4 oz glass	10 day													X																		
SL-864-SA5A-SB-4.0-5.0	6/18/13 14:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-864-SA5A-SB-4.0-5.0	6/18/13 14:10	SO	None	2 - Encore	10 day																			X												

13013/1398132/7097884-92

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/18/2013

CarrierName: FedEx

AirbillNo: 796032196537

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20130618-01

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: R. Carter

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
FedEx	6/18/13	1600									
										6/19/13	0905

COC Rev 2

COC: 20130618-01, Page 2 of 2

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Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 6/19/13

Time of Receipt: 0905

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.9	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: CEshler 3647 **Date/Time:** 6/19/13 0958

Issued by Dept. 6042 Management

2174.06

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 08, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/20/2013
Group Number: 1398465
SDG: PH060
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-061913 Water	7099654
EB2-061913 Water	7099655
TB-061913 Water	7099656
SL-859-SA5A-SB-0.0-0.5 Soil	7099657
SL-863-SA5A-SB-0.0-0.5 Soil	7099658
SL-863-SA5A-SB-4.0-5.0 Soil	7099659
SL-866-SA5A-SB-0.0-0.5 Soil	7099660
SL-866-SA5A-SB-5.5-6.5 Soil	7099661
SL-865-SA5A-SB-0.0-0.5 Soil	7099662
SL-865-SA5A-SB-4.0-5.0 Soil	7099663
SL-865-SA5A-SB-9.0-10.0 Soil	7099664

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.053	U	0.053	0.011	1
12971	Acenaphthylene	208-96-8	0.053	U	0.053	0.011	1
12971	Anthracene	120-12-7	0.053	U	0.053	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.053	U	0.053	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.053	U	0.053	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.053	U	0.053	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.053	U	0.053	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.053	U	0.053	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.053	U	0.053	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.053	1
12971	Di-n-butylphthalate	84-74-2	0.17	J	1.1	0.053	1
12971	Chrysene	218-01-9	0.053	U	0.053	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.053	U	0.053	0.011	1
12971	Diethylphthalate	84-66-2	0.16	J	1.1	0.053	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.053	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.14	J	1.1	0.053	1
12971	Fluoranthene	206-44-0	0.053	U	0.053	0.011	1
12971	Fluorene	86-73-7	0.053	U	0.053	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	U	0.053	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.053	U	0.053	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.011	J	0.053	0.011	1
12971	Naphthalene	91-20-3	0.058		0.053	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.053	U	0.053	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.053	1
12971	Phenanthrene	85-01-8	0.053	U	0.053	0.032	1
12971	Pyrene	129-00-0	0.053	U	0.053	0.011	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is < the LOQ, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C30 - C40)	n.a.	0.50	U	0.50	0.10	1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.050	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0187 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0031 J	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00030	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.4	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.94	U	1.94	0.288	1
10915	12378-PeCDD	40321-76-4	9.72	U	9.72	0.336	1
10915	123478-HxCDD	39227-28-6	0.339	JBQ	9.72	0.236	1
10915	123678-HxCDD	57653-85-7	9.72	U	9.72	0.253	1
10915	123789-HxCDD	19408-74-3	0.315	JBQ	9.72	0.251	1
10915	1234678-HpCDD	35822-46-9	0.753	JBQ	9.72	0.248	1
10915	OCDD	3268-87-9	2.25	JBQ	19.4	0.425	1
10915	2378-TCDF	51207-31-9	1.94	U	1.94	0.236	1
10915	12378-PeCDF	57117-41-6	0.410	JBQ	9.72	0.198	1
10915	23478-PeCDF	57117-31-4	0.602	JBQ	9.72	0.170	1
10915	123478-HxCDF	70648-26-9	0.304	JBQ	9.72	0.105	1
10915	123678-HxCDF	57117-44-9	0.337	JBQ	9.72	0.110	1
10915	123789-HxCDF	72918-21-9	0.450	JBQ	9.72	0.112	1
10915	234678-HxCDF	60851-34-5	0.349	JBQ	9.72	0.0919	1
10915	1234678-HpCDF	67562-39-4	0.592	JB	9.72	0.143	1
10915	1234789-HpCDF	55673-89-7	0.684	JBQ	9.72	0.159	1
10915	OCDF	39001-02-0	1.38	JBQ	19.4	0.378	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.00590				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	53	25 - 181
13C12-123478-HxCDD	55	32 - 141
13C12-123678-HxCDD	57	28 - 130
13C12-123789-HxCDD	55	28 - 130
13C12-1234678-HpCDD	51	23 - 140
13C12-OCDD	48	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	54	24 - 185
13C12-23478-PeCDF	57	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	59	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	54	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13175WAE026	06/27/2013 08:50	Joseph M Gambler	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13175WAE026	06/24/2013 18:30	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 14:42	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 14:42	Laura M Krieger	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131760025A	06/26/2013 23:13	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131760025A	06/26/2013 08:10	Catherine R Wiker	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175002	06/26/2013 03:25	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13175002	06/24/2013 12:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07044	Antimony	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07035	Arsenic	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07046	Barium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07047	Beryllium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
08014	Boron	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07049	Cadmium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01750	Calcium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07051	Chromium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07052	Cobalt	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07053	Copper	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01754	Iron	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07055	Lead	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01756	Lithium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01757	Magnesium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07058	Manganese	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07061	Nickel	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01762	Potassium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
01767	Sodium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07069	Tin	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07070	Titanium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07071	Vanadium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
07072	Zinc	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
10144	Zirconium	SW-846 6010C	1	131720635001	06/27/2013 20:39	John P Hook	1
06041	Selenium	SW-846 6020A	1	131720639002B	06/26/2013 08:52	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131720639002A	06/26/2013 08:52	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131720639002A	06/26/2013 08:52	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131720639002A	06/26/2013 08:52	Choon Y Tian	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099654
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:00 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB1 SDG#: PH060-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	3b Mercury 7470A	SW-846 7470A	1	131725713005	06/23/2013 10:31	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131720635001	06/23/2013 23:00	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131720639002	06/23/2013 23:00	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131725713005	06/22/2013 10:25	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13171121521A	06/20/2013 21:10	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.17	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.15	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.15	J	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.011	J	0.052	0.010	1
12971	Naphthalene	91-20-3	0.057		0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is < the LOQ, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.050	1
10365	EFH (C30 - C40)	n.a.	0.50	U	0.50	0.10	1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.050	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0062 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00030	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000070	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.4	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.94	U	1.94	0.338	1
10915	12378-PeCDD	40321-76-4	0.341	JBQ	9.70	0.301	1
10915	123478-HxCDD	39227-28-6	9.70	U	9.70	0.195	1
10915	123678-HxCDD	57653-85-7	9.70	U	9.70	0.207	1
10915	123789-HxCDD	19408-74-3	0.240	JBQ	9.70	0.206	1
10915	1234678-HpCDD	35822-46-9	0.584	JB	9.70	0.238	1
10915	OCDD	3268-87-9	1.05	JB	19.4	0.252	1
10915	2378-TCDF	51207-31-9	0.250	JQ	1.94	0.218	1
10915	12378-PeCDF	57117-41-6	0.326	JB	9.70	0.176	1
10915	23478-PeCDF	57117-31-4	0.333	JBQ	9.70	0.151	1
10915	123478-HxCDF	70648-26-9	0.292	JBQ	9.70	0.0978	1
10915	123678-HxCDF	57117-44-9	0.241	JBQ	9.70	0.0996	1
10915	123789-HxCDF	72918-21-9	9.70	U	9.70	0.109	1
10915	234678-HxCDF	60851-34-5	9.70	U	9.70	0.0937	1
10915	1234678-HpCDF	67562-39-4	0.378	JBQ	9.70	0.0729	1
10915	1234789-HpCDF	55673-89-7	0.126	JB	9.70	0.0807	1
10915	OCDF	39001-02-0	0.721	JBQ	19.4	0.231	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0172				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	90	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13175WAE026	06/27/2013 09:20	Joseph M Gambler	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13175WAE026	06/24/2013 18:30	Nicholas W Shroyer	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 15:07	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 15:07	Laura M Krieger	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131760025A	06/26/2013 23:34	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	131760025A	06/26/2013 08:10	Catherine R Wiker	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13175002	06/26/2013 04:22	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13175002	06/24/2013 12:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07044	Antimony	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07035	Arsenic	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07046	Barium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07047	Beryllium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
08014	Boron	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07049	Cadmium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01750	Calcium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07051	Chromium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07052	Cobalt	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07053	Copper	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01754	Iron	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07055	Lead	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01756	Lithium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01757	Magnesium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07058	Manganese	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07061	Nickel	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01762	Potassium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
01767	Sodium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07069	Tin	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07070	Titanium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07071	Vanadium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
07072	Zinc	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
10144	Zirconium	SW-846 6010C	1	131720635001	06/27/2013 20:42	John P Hook	1
06041	Selenium	SW-846 6020A	1	131720639002B	06/26/2013 08:55	Choon Y Tian	1
06042	Silver	SW-846 6020A	1	131720639002A	06/26/2013 08:55	Choon Y Tian	1
06044	Strontium	SW-846 6020A	1	131720639002A	06/26/2013 08:55	Choon Y Tian	1
06045	Thallium	SW-846 6020A	1	131720639002A	06/26/2013 08:55	Choon Y Tian	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099655
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 15:30 by PH

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19EB2 SDG#: PH060-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	3b Mercury 7470A	SW-846 7470A	1	131725713005	06/23/2013 10:33	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	131720635001	06/23/2013 23:00	Annamaria Stipkovits	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	131720639002	06/23/2013 23:00	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131725713005	06/22/2013 10:25	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13171121521A	06/20/2013 21:10	Luz M Groff	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-061913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7099656
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 08:00

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

19TB1 SDG#: PH060-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13173A94A	06/22/2013 15:32	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	13173A94A	06/22/2013 15:32	Laura M Krieger	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-859-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099657
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:50 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85900 SDG#: PH060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.7	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	3.8	J	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.7	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.7	10
12969	Benzo(b)fluoranthene	205-99-2	26		17	6.7	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	7.6	J	17	6.7	10
12969	Benzo(k)fluoranthene	207-08-9	7.9	J	17	6.7	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	61	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	61	10
12969	Chrysene	218-01-9	35		17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.7	10
12969	Diethylphthalate	84-66-2	180	U	180	61	10
12969	Dimethylphthalate	131-11-3	180	U	180	61	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	61	10
12969	Fluoranthene	206-44-0	110		17	6.7	10
12969	Fluorene	86-73-7	17	U	17	6.7	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.7	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.7	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.7	10
12969	Naphthalene	91-20-3	17	U	17	6.7	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.7	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	61	10
12969	Phenanthrene	85-01-8	80		17	6.7	10
12969	Pyrene	129-00-0	84		17	6.7	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	10	U	10	4.1	2
12952	EFH (C21-C30)	n.a.	25		10	4.1	2
12952	EFH (C30-C40)	n.a.	85		20	8.1	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.745	1
06935	Arsenic	7440-38-2	4.98		4.02	0.704	1
06946	Barium	7440-39-3	102		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.623	J	1.01	0.0674	1
07914	Boron	7440-42-8	4.72	J	10.1	0.845	1
06949	Cadmium	7440-43-9	0.432	J	1.01	0.0765	1
01650	Calcium	7440-70-2	3,620		20.1	3.36	1
06951	Chromium	7440-47-3	24.1		3.02	0.161	1
06952	Cobalt	7440-48-4	6.05		1.01	0.0996	1
06953	Copper	7440-50-8	12.4		2.01	0.292	1
01654	Iron	7439-89-6	22,300		40.2	3.64	1
06955	Lead	7439-92-1	67.0		3.02	0.503	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-859-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099657
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:50 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85900 SDG#: PH060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	23.6		4.0	0.34	1
01657	Magnesium	7439-95-4	5,040		10.1	1.68	1
06958	Manganese	7439-96-5	328		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.486	J	2.01	0.171	1
06961	Nickel	7440-02-0	14.5		2.01	0.131	1
10145	Phosphorus	7723-14-0	591		10.1	2.91	1
01662	Potassium	7440-09-7	4,770		101	8.39	1
01667	Sodium	7440-23-5	78.1	J	101	16.8	1
06969	Tin	7440-31-5	3.22	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,250		1.01	0.171	1
06971	Vanadium	7440-62-2	41.5		1.01	0.131	1
06972	Zinc	7440-66-6	88.2		4.02	0.201	1
10146	Zirconium	7440-67-7	3.89	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.187	J	0.402	0.101	2
06142	Silver	7440-22-4	0.173	J	0.201	0.0262	2
06144	Strontium	7440-24-6	33.6		0.402	0.0523	2
06145	Thallium	7440-28-0	0.361		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0401		0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.52		0.0100	0.0100	1
	The pH was measured in water at 21.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-859-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099657
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:50 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85900 SDG#: PH060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.723 JQ	1.00	0.0664	1
11031	12378-PeCDD	40321-76-4	5.54	5.02	0.164	1
11031	123478-HxCDD	39227-28-6	9.28	5.02	0.0863	1
11031	123678-HxCDD	57653-85-7	24.5	5.02	0.0914	1
11031	123789-HxCDD	19408-74-3	19.9 B	5.02	0.0897	1
11031	1234678-HpCDD	35822-46-9	658 B	5.02	0.284	1
11031	OCDD	3268-87-9	14,700 EB	10.0	0.152	1
11650	2378-TCDF-Conf	51207-31-9	1.07 BC	1.00	0.0812	1
11031	12378-PeCDF	57117-41-6	1.72 JB	5.02	0.0678	1
11031	23478-PeCDF	57117-31-4	2.67 JB	5.02	0.0667	1
11031	123478-HxCDF	70648-26-9	2.93 JB	5.02	0.0610	1
11031	123678-HxCDF	57117-44-9	1.58 JB	5.02	0.0612	1
11031	123789-HxCDF	72918-21-9	1.04 J	5.02	0.0676	1
11031	234678-HxCDF	60851-34-5	2.01 J	5.02	0.0596	1
11031	1234678-HpCDF	67562-39-4	35.6	5.02	0.0500	1
11031	1234789-HpCDF	55673-89-7	2.12 JB	5.02	0.0589	1
11031	OCDF	39001-02-0	120 B	10.0	0.0520	1
Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	24.0			1

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-859-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099657
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:50 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85900 SDG#: PH060-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/27/2013 17:06	Chad A Moline	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 16:38	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 07:28	Joseph D Anderson	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	13178002	07/02/2013 00:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:27	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:06	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:06	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:06	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:06	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-859-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099657
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:50 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85900 SDG#: PH060-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:40	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.9	10
12969	Acenaphthylene	208-96-8	17	U	17	3.5	10
12969	Anthracene	120-12-7	17	U	17	3.5	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.9	10
12969	Benzo(a)pyrene	50-32-8	7.5	J	17	6.9	10
12969	Benzo(b)fluoranthene	205-99-2	22		17	6.9	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	35	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.9	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.9	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	62	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	62	10
12969	Chrysene	218-01-9	21		17	3.5	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.9	10
12969	Diethylphthalate	84-66-2	190	U	190	62	10
12969	Dimethylphthalate	131-11-3	190	U	190	62	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	62	10
12969	Fluoranthene	206-44-0	24		17	6.9	10
12969	Fluorene	86-73-7	17	U	17	6.9	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.9	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.9	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.9	10
12969	Naphthalene	91-20-3	17	U	17	6.9	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.9	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	62	10
12969	Phenanthrene	85-01-8	18		17	6.9	10
12969	Pyrene	129-00-0	22		17	6.9	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	52	U	52	21	10
12952	EFH (C15-C20)	n.a.	52	U	52	21	10
12952	EFH (C21-C30)	n.a.	350		52	21	10
12952	EFH (C30-C40)	n.a.	710		100	42	10
12952	EFH (C8-C11)	n.a.	52	U	52	21	10
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,300		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.754	1
06935	Arsenic	7440-38-2	3.73	J	4.08	0.713	1
06946	Barium	7440-39-3	71.4		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.445	J	1.02	0.0683	1
07914	Boron	7440-42-8	2.46	J	10.2	0.856	1
06949	Cadmium	7440-43-9	0.255	J	1.02	0.0775	1
01650	Calcium	7440-70-2	2,300		20.4	3.40	1
06951	Chromium	7440-47-3	15.1		3.06	0.163	1
06952	Cobalt	7440-48-4	4.41		1.02	0.101	1
06953	Copper	7440-50-8	7.83		2.04	0.296	1
01654	Iron	7439-89-6	16,900		40.8	3.69	1
06955	Lead	7439-92-1	16.5		3.06	0.510	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	16.9		4.1	0.35	1
01657	Magnesium	7439-95-4	3,400		10.2	1.70	1
06958	Manganese	7439-96-5	258		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.406	J	2.04	0.173	1
06961	Nickel	7440-02-0	9.29		2.04	0.132	1
10145	Phosphorus	7723-14-0	365		10.2	2.95	1
01662	Potassium	7440-09-7	2,620		102	8.50	1
01667	Sodium	7440-23-5	58.4	J	102	17.0	1
06969	Tin	7440-31-5	2.88	J	10.2	0.224	1
06970	Titanium	7440-32-6	898		1.02	0.173	1
06971	Vanadium	7440-62-2	30.7		1.02	0.132	1
06972	Zinc	7440-66-6	104		4.08	0.204	1
10146	Zirconium	7440-67-7	1.87	J	5.10	0.856	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.157	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0615	J	0.204	0.0265	2
06144	Strontium	7440-24-6	15.4		0.408	0.0530	2
06145	Thallium	7440-28-0	0.204		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	5.31		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0892	J	1.03	0.0373	1
11031	12378-PeCDD	40321-76-4	0.764	JQ	5.14	0.0651	1
11031	123478-HxCDD	39227-28-6	0.955	J	5.14	0.0548	1
11031	123678-HxCDD	57653-85-7	2.35	J	5.14	0.0590	1
11031	123789-HxCDD	19408-74-3	2.09	JB	5.14	0.0575	1
11031	1234678-HpCDD	35822-46-9	58.9	B	5.14	0.0901	1
11031	OCDD	3268-87-9	973	B	10.3	0.0683	1
11031	2378-TCDF	51207-31-9	0.398	JB	1.03	0.0637	1
11031	12378-PeCDF	57117-41-6	0.726	JB	5.14	0.0442	1
11031	23478-PeCDF	57117-31-4	0.781	JB	5.14	0.0405	1
11031	123478-HxCDF	70648-26-9	0.482	JB	5.14	0.0351	1
11031	123678-HxCDF	57117-44-9	0.432	JB	5.14	0.0348	1
11031	123789-HxCDF	72918-21-9	0.326	J	5.14	0.0362	1
11031	234678-HxCDF	60851-34-5	0.484	J	5.14	0.0331	1
11031	1234678-HpCDF	67562-39-4	6.30		5.14	0.0304	1
11031	1234789-HpCDF	55673-89-7	0.352	JB	5.14	0.0363	1
11031	OCDF	39001-02-0	14.6	B	10.3	0.0332	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.05				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	101	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	92	26 - 138
13C12-OCDF	93	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 03:05	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 18:01	Heather E Williams	10
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 08:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:31	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:08	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:08	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:08	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:08	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:42	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099658
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:00 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86300 SDG#: PH060-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.5	J	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.55	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.71
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.6		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,100		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	5.36		4.15	0.726	1
06946	Barium	7440-39-3	99.0		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.781	J	1.04	0.0695	1
07914	Boron	7440-42-8	1.66	J	10.4	0.871	1
06949	Cadmium	7440-43-9	0.103	J	1.04	0.0788	1
01650	Calcium	7440-70-2	1,960		20.7	3.46	1
06951	Chromium	7440-47-3	21.1		3.11	0.166	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.95		1.04	0.103	1
06953	Copper	7440-50-8	8.78		2.07	0.301	1
01654	Iron	7439-89-6	22,100		41.5	3.75	1
06955	Lead	7439-92-1	7.44		3.11	0.518	1
01656	Lithium	7439-93-2	23.8		4.1	0.35	1
01657	Magnesium	7439-95-4	4,570		10.4	1.73	1
06958	Manganese	7439-96-5	324		1.04	0.0861	1
06960	Molybdenum	7439-98-7	0.507	J	2.07	0.176	1
06961	Nickel	7440-02-0	13.0		2.07	0.135	1
10145	Phosphorus	7723-14-0	294		10.4	3.00	1
01662	Potassium	7440-09-7	2,850		104	8.65	1
01667	Sodium	7440-23-5	89.9	J	104	17.3	1
06969	Tin	7440-31-5	2.99	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,210		1.04	0.176	1
06971	Vanadium	7440-62-2	40.4		1.04	0.135	1
06972	Zinc	7440-66-6	54.6		4.15	0.207	1
10146	Zirconium	7440-67-7	3.81	J	5.18	0.871	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.143	J	0.415	0.104	2
06142	Silver	7440-22-4	0.0547	J	0.207	0.0270	2
06144	Strontium	7440-24-6	30.2		0.415	0.0539	2
06145	Thallium	7440-28-0	0.374		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.47		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0413	1
11031	12378-PeCDD	40321-76-4	0.0448	JQ	5.15	0.0425	1
11031	123478-HxCDD	39227-28-6	0.0605	JQ	5.15	0.0356	1
11031	123678-HxCDD	57653-85-7	0.190	J	5.15	0.0359	1
11031	123789-HxCDD	19408-74-3	0.262	JB	5.15	0.0352	1
11031	1234678-HpCDD	35822-46-9	2.79	JB	5.15	0.0484	1
11031	OCDD	3268-87-9	40.0	B	10.3	0.0398	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0341	1
11031	12378-PeCDF	57117-41-6	0.106	JB	5.15	0.0240	1
11031	23478-PeCDF	57117-31-4	0.0681	JBQ	5.15	0.0238	1
11031	123478-HxCDF	70648-26-9	0.0506	JBQ	5.15	0.0212	1
11031	123678-HxCDF	57117-44-9	0.0276	JBQ	5.15	0.0193	1
11031	123789-HxCDF	72918-21-9	0.182	JQ	5.15	0.0223	1
11031	234678-HxCDF	60851-34-5	0.0396	JQ	5.15	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.335	JQ	5.15	0.0193	1
11031	1234789-HpCDF	55673-89-7	0.0369	JBQ	5.15	0.0251	1
11031	OCDF	39001-02-0	0.684	JB	10.3	0.0374	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0885				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	93	23 - 140
13C12-OCDD	93	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	83	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 03:36	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 11:31	Laura M Krieger	26.71
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317131478	06/20/2013 16:10	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317131478	06/20/2013 16:10	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 11:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 09:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:35	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:11	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:11	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:11	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-863-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099659
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 09:20 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86340 SDG#: PH060-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:11	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:45	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.8	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.8	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.8	10
12969	Benzo(b)fluoranthene	205-99-2	7.6	J	17	6.8	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.8	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.8	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	62	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	62	10
12969	Chrysene	218-01-9	10	J	17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.8	10
12969	Diethylphthalate	84-66-2	180	U	180	62	10
12969	Dimethylphthalate	131-11-3	180	U	180	62	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	430		180	62	10
12969	Fluoranthene	206-44-0	20		17	6.8	10
12969	Fluorene	86-73-7	17	U	17	6.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.8	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.8	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.8	10
12969	Naphthalene	91-20-3	17	U	17	6.8	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.8	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	62	10
12969	Phenanthrene	85-01-8	14	J	17	6.8	10
12969	Pyrene	129-00-0	15	J	17	6.8	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	26	U	26	10	5
12952	EFH (C15-C20)	n.a.	26	U	26	10	5
12952	EFH (C21-C30)	n.a.	70		26	10	5
12952	EFH (C30-C40)	n.a.	200		51	21	5
12952	EFH (C8-C11)	n.a.	26	U	26	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,200		40.3	7.27	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.746	1
06935	Arsenic	7440-38-2	5.40		4.03	0.706	1
06946	Barium	7440-39-3	105		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.700	J	1.01	0.0676	1
07914	Boron	7440-42-8	2.82	J	10.1	0.847	1
06949	Cadmium	7440-43-9	0.207	J	1.01	0.0767	1
01650	Calcium	7440-70-2	2,490		20.2	3.37	1
06951	Chromium	7440-47-3	22.2		3.03	0.161	1
06952	Cobalt	7440-48-4	5.76		1.01	0.0999	1
06953	Copper	7440-50-8	8.86		2.02	0.293	1
01654	Iron	7439-89-6	21,600		40.3	3.65	1
06955	Lead	7439-92-1	9.40		3.03	0.504	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	22.5		4.0	0.34	1
01657	Magnesium	7439-95-4	4,500		10.1	1.68	1
06958	Manganese	7439-96-5	304		1.01	0.0837	1
06960	Molybdenum	7439-98-7	0.469	J	2.02	0.171	1
06961	Nickel	7440-02-0	15.0		2.02	0.131	1
10145	Phosphorus	7723-14-0	396		10.1	2.91	1
01662	Potassium	7440-09-7	3,590		101	8.41	1
01667	Sodium	7440-23-5	82.0	J	101	16.8	1
06969	Tin	7440-31-5	2.91	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,210		1.01	0.171	1
06971	Vanadium	7440-62-2	41.6		1.01	0.131	1
06972	Zinc	7440-66-6	58.6		4.03	0.202	1
10146	Zirconium	7440-67-7	3.73	J	5.04	0.847	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.228	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0779	J	0.202	0.0262	2
06144	Strontium	7440-24-6	31.6		0.403	0.0524	2
06145	Thallium	7440-28-0	0.394		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.82		0.0100	0.0100	1
	The pH was measured in water at 22 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.8		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0781	J	1.03	0.0389	1
11031	12378-PeCDD	40321-76-4	0.249	J	5.14	0.0557	1
11031	123478-HxCDD	39227-28-6	0.497	J	5.14	0.0664	1
11031	123678-HxCDD	57653-85-7	1.28	J	5.14	0.0707	1
11031	123789-HxCDD	19408-74-3	0.971	JBQ	5.14	0.0669	1
11031	1234678-HpCDD	35822-46-9	38.3	B	5.14	0.0947	1
11031	OCDD	3268-87-9	588	B	10.3	0.0597	1
11031	2378-TCDF	51207-31-9	0.166	JB	1.03	0.0632	1
11031	12378-PeCDF	57117-41-6	0.389	JB	5.14	0.0423	1
11031	23478-PeCDF	57117-31-4	0.506	JB	5.14	0.0401	1
11031	123478-HxCDF	70648-26-9	0.344	JB	5.14	0.0372	1
11031	123678-HxCDF	57117-44-9	0.275	JB	5.14	0.0365	1
11031	123789-HxCDF	72918-21-9	0.329	J	5.14	0.0378	1
11031	234678-HxCDF	60851-34-5	0.323	J	5.14	0.0336	1
11031	1234678-HpCDF	67562-39-4	5.05	J	5.14	0.0278	1
11031	1234789-HpCDF	55673-89-7	0.230	JB	5.14	0.0340	1
11031	OCDF	39001-02-0	6.80	JB	10.3	0.0425	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.43				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 04:08	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 17:19	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 10:18	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:39	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:13	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:13	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:13	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:13	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:47	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099660
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 10:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86600 SDG#: PH060-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.73	J	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	47		19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.77
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	18		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	26		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	7.33		4.17	0.729	1
06946	Barium	7440-39-3	91.1		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.752	J	1.04	0.0698	1
07914	Boron	7440-42-8	1.67	J	10.4	0.875	1
06949	Cadmium	7440-43-9	0.185	J	1.04	0.0792	1
01650	Calcium	7440-70-2	2,940		20.8	3.48	1
06951	Chromium	7440-47-3	27.7		3.13	0.167	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	7.46		1.04	0.103	1
06953	Copper	7440-50-8	12.1		2.08	0.302	1
01654	Iron	7439-89-6	25,000		41.7	3.77	1
06955	Lead	7439-92-1	8.07		3.13	0.521	1
01656	Lithium	7439-93-2	27.7		4.2	0.35	1
01657	Magnesium	7439-95-4	5,550		10.4	1.74	1
06958	Manganese	7439-96-5	357		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.434	J	2.08	0.177	1
06961	Nickel	7440-02-0	18.0		2.08	0.135	1
10145	Phosphorus	7723-14-0	486		10.4	3.01	1
01662	Potassium	7440-09-7	3,140		104	8.69	1
01667	Sodium	7440-23-5	90.8	J	104	17.4	1
06969	Tin	7440-31-5	3.01	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,240		1.04	0.177	1
06971	Vanadium	7440-62-2	46.7		1.04	0.135	1
06972	Zinc	7440-66-6	65.5		4.17	0.208	1
10146	Zirconium	7440-67-7	3.87	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.237	J	0.417	0.104	2
06142	Silver	7440-22-4	0.0839	J	0.208	0.0271	2
06144	Strontium	7440-24-6	34.0		0.417	0.0542	2
06145	Thallium	7440-28-0	0.451		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.92		0.0100	0.0100	1
	The pH was measured in water at 21.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0305	1
11031	12378-PeCDD	40321-76-4	0.0650	JQ	5.03	0.0391	1
11031	123478-HxCDD	39227-28-6	0.109	J	5.03	0.0432	1
11031	123678-HxCDD	57653-85-7	0.191	JQ	5.03	0.0467	1
11031	123789-HxCDD	19408-74-3	0.155	JBQ	5.03	0.0430	1
11031	1234678-HpCDD	35822-46-9	4.15	JB	5.03	0.0413	1
11031	OCDD	3268-87-9	50.6	B	10.1	0.0352	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0322	1
11031	12378-PeCDF	57117-41-6	0.0730	JBQ	5.03	0.0243	1
11031	23478-PeCDF	57117-31-4	0.0843	JBQ	5.03	0.0248	1
11031	123478-HxCDF	70648-26-9	0.0467	JBQ	5.03	0.0223	1
11031	123678-HxCDF	57117-44-9	0.0516	JBQ	5.03	0.0209	1
11031	123789-HxCDF	72918-21-9	0.0722	J	5.03	0.0199	1
11031	234678-HxCDF	60851-34-5	0.0561	JQ	5.03	0.0200	1
11031	1234678-HpCDF	67562-39-4	0.483	J	5.03	0.0243	1
11031	1234789-HpCDF	55673-89-7	0.0465	JB	5.03	0.0323	1
11031	OCDF	39001-02-0	0.782	JB	10.1	0.0378	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0803				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	98	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	87	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 04:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 12:09	Laura M Krieger	25.77
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317131478	06/20/2013 16:11	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317131478	06/20/2013 16:11	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 13:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 11:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:43	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:16	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:16	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:16	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-866-SA5A-SB-5.5-6.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099661
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 11:15 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86655 SDG#: PH060-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:16	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:49	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.8	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.8	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.8	10
12969	Benzo(b)fluoranthene	205-99-2	20		17	6.8	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.8	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.8	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	61	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	61	10
12969	Chrysene	218-01-9	25		17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.8	10
12969	Diethylphthalate	84-66-2	180	U	180	61	10
12969	Dimethylphthalate	131-11-3	180	U	180	61	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	61	10
12969	Fluoranthene	206-44-0	66		17	6.8	10
12969	Fluorene	86-73-7	17	U	17	6.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.8	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.8	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.8	10
12969	Naphthalene	91-20-3	17	U	17	6.8	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.8	10
12969	Di-n-octylphthalate	117-84-0	160	J	180	61	10
12969	Phenanthrene	85-01-8	49		17	6.8	10
12969	Pyrene	129-00-0	47		17	6.8	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.6	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	9.9	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	4.74		4.00	0.700	1
06946	Barium	7440-39-3	105		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.679	J	1.00	0.0670	1
07914	Boron	7440-42-8	3.03	J	10.0	0.840	1
06949	Cadmium	7440-43-9	0.188	J	1.00	0.0760	1
01650	Calcium	7440-70-2	2,510		20.0	3.34	1
06951	Chromium	7440-47-3	21.6		3.00	0.160	1
06952	Cobalt	7440-48-4	5.60		1.00	0.0990	1
06953	Copper	7440-50-8	8.13		2.00	0.290	1
01654	Iron	7439-89-6	20,800		40.0	3.62	1
06955	Lead	7439-92-1	10.5		3.00	0.500	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.8	4.0	0.34	1
01657	Magnesium	7439-95-4	4,300	10.0	1.67	1
06958	Manganese	7439-96-5	294	1.00	0.0830	1
06960	Molybdenum	7439-98-7	0.666 J	2.00	0.170	1
06961	Nickel	7440-02-0	13.5	2.00	0.130	1
10145	Phosphorus	7723-14-0	328	10.0	2.89	1
01662	Potassium	7440-09-7	3,300	100	8.34	1
01667	Sodium	7440-23-5	113	100	16.7	1
06969	Tin	7440-31-5	2.99 J	10.0	0.220	1
06970	Titanium	7440-32-6	1,230	1.00	0.170	1
06971	Vanadium	7440-62-2	41.1	1.00	0.130	1
06972	Zinc	7440-66-6	54.2	4.00	0.200	1
10146	Zirconium	7440-67-7	3.89 J	5.00	0.840	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.263 J	0.400	0.100	2
06142	Silver	7440-22-4	0.0803 J	0.200	0.0260	2
06144	Strontium	7440-24-6	39.7	0.400	0.0520	2
06145	Thallium	7440-28-0	0.418	0.200	0.0300	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169 U	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.04	0.0100	0.0100	1
	The pH was measured in water at 21.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0853	JQ	1.02	0.0391	1
11031	12378-PeCDD	40321-76-4	0.524	JQ	5.10	0.0935	1
11031	123478-HxCDD	39227-28-6	1.87	J	5.10	0.0597	1
11031	123678-HxCDD	57653-85-7	4.94	J	5.10	0.0626	1
11031	123789-HxCDD	19408-74-3	2.48	JB	5.10	0.0604	1
11031	1234678-HpCDD	35822-46-9	146	B	5.10	0.109	1
11031	OCDD	3268-87-9	1,610	B	10.2	0.0983	1
11031	2378-TCDF	51207-31-9	0.270	JB	1.02	0.0713	1
11031	12378-PeCDF	57117-41-6	0.877	JB	5.10	0.0502	1
11031	23478-PeCDF	57117-31-4	1.29	JB	5.10	0.0484	1
11031	123478-HxCDF	70648-26-9	0.968	JB	5.10	0.0412	1
11031	123678-HxCDF	57117-44-9	0.815	JB	5.10	0.0443	1
11031	123789-HxCDF	72918-21-9	0.666	J	5.10	0.0402	1
11031	234678-HxCDF	60851-34-5	1.07	J	5.10	0.0393	1
11031	1234678-HpCDF	67562-39-4	9.09		5.10	0.0318	1
11031	1234789-HpCDF	55673-89-7	0.591	JBQ	5.10	0.0368	1
11031	OCDF	39001-02-0	11.1	B	10.2	0.0353	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.75				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	97	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	96	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 05:12	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 11:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 12:11	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:47	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:18	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:18	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:18	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:18	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:51	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099662
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:40 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86500 SDG#: PH060-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.7		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.4	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	0.74	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.65
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.0		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	14		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,400		41.1	7.41	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.761	1
06935	Arsenic	7440-38-2	5.02		4.11	0.720	1
06946	Barium	7440-39-3	113		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.646	J	1.03	0.0689	1
07914	Boron	7440-42-8	3.25	J	10.3	0.864	1
06949	Cadmium	7440-43-9	0.228	J	1.03	0.0781	1
01650	Calcium	7440-70-2	2,390		20.6	3.43	1
06951	Chromium	7440-47-3	22.3		3.08	0.165	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	5.75		1.03	0.102	1
06953	Copper	7440-50-8	9.88		2.06	0.298	1
01654	Iron	7439-89-6	21,100		41.1	3.72	1
06955	Lead	7439-92-1	9.02		3.08	0.514	1
01656	Lithium	7439-93-2	21.5		4.1	0.35	1
01657	Magnesium	7439-95-4	4,430		10.3	1.72	1
06958	Manganese	7439-96-5	352		1.03	0.0853	1
06960	Molybdenum	7439-98-7	0.481	J	2.06	0.175	1
06961	Nickel	7440-02-0	14.5		2.06	0.134	1
10145	Phosphorus	7723-14-0	396		10.3	2.97	1
01662	Potassium	7440-09-7	3,730		103	8.57	1
01667	Sodium	7440-23-5	94.0	J	103	17.2	1
06969	Tin	7440-31-5	2.98	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,190		1.03	0.175	1
06971	Vanadium	7440-62-2	39.4		1.03	0.134	1
06972	Zinc	7440-66-6	58.1		4.11	0.206	1
10146	Zirconium	7440-67-7	3.03	J	5.14	0.864	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.244	J	0.411	0.103	2
06142	Silver	7440-22-4	0.0888	J	0.206	0.0267	2
06144	Strontium	7440-24-6	40.8		0.411	0.0535	2
06145	Thallium	7440-28-0	0.469		0.206	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.82		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.998	U	0.998	0.0291	1
11031	12378-PeCDD	40321-76-4	0.0742	JQ	4.99	0.0332	1
11031	123478-HxCDD	39227-28-6	0.0890	JQ	4.99	0.0379	1
11031	123678-HxCDD	57653-85-7	0.310	JQ	4.99	0.0414	1
11031	123789-HxCDD	19408-74-3	0.352	JB	4.99	0.0378	1
11031	1234678-HpCDD	35822-46-9	4.15	JB	4.99	0.0567	1
11031	OCDD	3268-87-9	70.5	B	9.98	0.0402	1
11031	2378-TCDF	51207-31-9	0.108	JBQ	0.998	0.0467	1
11031	12378-PeCDF	57117-41-6	0.355	JBQ	4.99	0.0295	1
11031	23478-PeCDF	57117-31-4	0.353	JBQ	4.99	0.0301	1
11031	123478-HxCDF	70648-26-9	0.0914	JBQ	4.99	0.0246	1
11031	123678-HxCDF	57117-44-9	0.125	JBQ	4.99	0.0222	1
11031	123789-HxCDF	72918-21-9	0.207	J	4.99	0.0237	1
11031	234678-HxCDF	60851-34-5	0.132	JQ	4.99	0.0228	1
11031	1234678-HpCDF	67562-39-4	0.870	J	4.99	0.0157	1
11031	1234789-HpCDF	55673-89-7	0.0476	JBQ	4.99	0.0261	1
11031	OCDF	39001-02-0	2.51	JB	9.98	0.0648	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.128				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	44	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 05:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 12:47	Laura M Krieger	26.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317131478	06/20/2013 16:13	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317131478	06/20/2013 16:13	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 12:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 17:02	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 20:58	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:25	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:25	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:25	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099663
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 13:55 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86540 SDG#: PH060-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:25	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:53	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.46
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		41.6	7.49	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.769	1
06935	Arsenic	7440-38-2	20.8		4.16	0.728	1
06946	Barium	7440-39-3	71.0		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.973	J	1.04	0.0696	1
07914	Boron	7440-42-8	10.4	U	10.4	0.873	1
06949	Cadmium	7440-43-9	0.235	J	1.04	0.0790	1
01650	Calcium	7440-70-2	3,580		20.8	3.47	1
06951	Chromium	7440-47-3	38.8		3.12	0.166	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	7.46		1.04	0.103	1
06953	Copper	7440-50-8	20.5		2.08	0.301	1
01654	Iron	7439-89-6	39,700		208	18.8	5
06955	Lead	7439-92-1	10.2		3.12	0.520	1
01656	Lithium	7439-93-2	28.6		4.2	0.35	1
01657	Magnesium	7439-95-4	6,810		10.4	1.74	1
06958	Manganese	7439-96-5	336		1.04	0.0863	1
06960	Molybdenum	7439-98-7	1.34	J	2.08	0.177	1
06961	Nickel	7440-02-0	31.4		2.08	0.135	1
10145	Phosphorus	7723-14-0	501		10.4	3.00	1
01662	Potassium	7440-09-7	2,220		104	8.67	1
01667	Sodium	7440-23-5	145		104	17.4	1
06969	Tin	7440-31-5	3.21	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,320		1.04	0.177	1
06971	Vanadium	7440-62-2	64.9		1.04	0.135	1
06972	Zinc	7440-66-6	82.0		4.16	0.208	1
10146	Zirconium	7440-67-7	4.30	J	5.20	0.873	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.278	J	0.416	0.104	2
06142	Silver	7440-22-4	0.129	J	0.208	0.0270	2
06144	Strontium	7440-24-6	23.0		0.416	0.0541	2
06145	Thallium	7440-28-0	0.782		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0177		0.0171	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.64		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0305	1
11031	12378-PeCDD	40321-76-4	0.105	JQ	5.34	0.0427	1
11031	123478-HxCDD	39227-28-6	0.0489	JQ	5.34	0.0233	1
11031	123678-HxCDD	57653-85-7	0.0932	J	5.34	0.0248	1
11031	123789-HxCDD	19408-74-3	0.0636	JB	5.34	0.0234	1
11031	1234678-HpCDD	35822-46-9	0.128	JB	5.34	0.0307	1
11031	OCDD	3268-87-9	0.792	JB	10.7	0.0299	1
11031	2378-TCDF	51207-31-9	0.0354	JBQ	1.07	0.0278	1
11031	12378-PeCDF	57117-41-6	0.118	JBQ	5.34	0.0198	1
11031	23478-PeCDF	57117-31-4	0.109	JBQ	5.34	0.0195	1
11031	123478-HxCDF	70648-26-9	0.107	JB	5.34	0.0138	1
11031	123678-HxCDF	57117-44-9	0.0764	JB	5.34	0.0131	1
11031	123789-HxCDF	72918-21-9	0.0690	J	5.34	0.0140	1
11031	234678-HxCDF	60851-34-5	0.0525	JQ	5.34	0.0121	1
11031	1234678-HpCDF	67562-39-4	0.0695	JQ	5.34	0.00803	1
11031	1234789-HpCDF	55673-89-7	0.0206	JBQ	5.34	0.0151	1
11031	OCDF	39001-02-0	0.0850	JBQ	10.7	0.0528	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0423				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	97	32 - 141
13C12-123678-HxCDD	97	28 - 130
13C12-123789-HxCDD	98	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	93	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	109	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 06:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13172A16A	06/22/2013 13:25	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317131478	06/20/2013 16:14	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317131478	06/20/2013 16:16	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 09:02	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 17:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/28/2013 02:11	John W Yanzuk II	5
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 21:02	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:28	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:28	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:28	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-865-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7099664
LL Group # 1398465
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/19/2013 14:10 by VC

Submitted: 06/20/2013 09:00
Reported: 07/08/2013 15:23

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

86590 SDG#: PH060-11*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:28	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 12:59	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13171039402A	06/20/2013 22:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13176162402B	06/25/2013 22:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13173SLC026	Sample number(s): 7099657-7099664									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	97		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	98		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	114		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	114		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	109		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	98		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	112		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	89		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Batch number: 13175WAE026	Sample number(s): 7099654-7099655									
Acenaphthene	0.050	U	0.050	0.010	ug/l	101	98	65-124	3	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	111	109	72-113	2	30
Anthracene	0.050	U	0.050	0.010	ug/l	101	102	70-117	2	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	100	97	75-115	3	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	102	103	72-120	1	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	117	111	74-130	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	98	95	70-130	3	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	97	118	63-121	19	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	110	107	74-118	3	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	87	89	40-138	2	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	100	141	70-145	34*	30
Chrysene	0.050	U	0.050	0.010	ug/l	103	103	75-112	0	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	92	116	66-122	23	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	101	107	74-129	5	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	101	97	40-119	4	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.077	J	1.0	0.050	ug/l	78	100	70-143	25	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	104	99	73-116	5	30
Fluorene	0.050	U	0.050	0.010	ug/l	102	97	74-115	5	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	93	113	66-122	19	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	107	103	71-120	3	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	101	97	74-119	4	30
Naphthalene	0.050	U	0.050	0.030	ug/l	100	98	67-118	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	102	102	36-120	0	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	57	72	57-145	22	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	101	101	72-109	0	30
Pyrene	0.050	U	0.050	0.010	ug/l	100	101	71-116	0	30
Batch number: 13172A16A	Sample number(s): 7099659,7099661,7099663-7099664									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	85		67-119		
Batch number: 13173A94A	Sample number(s): 7099654-7099656									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	102	95	75-135	8	30
Batch number: 131730016A	Sample number(s): 7099657-7099664									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	107		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	100		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	82		49-107		
Batch number: 131760025A	Sample number(s): 7099654-7099655									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	93	91	70-130	2	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	98	96	70-130	2	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	101	99	70-130	1	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	96	115	70-130	18	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	73	73	70-130	1	30
Batch number: 131720635001	Sample number(s): 7099654-7099655									
Aluminum	0.400	U	0.400	0.0828	mg/l	100	99	90-112	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	107	106	88-111	1	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	103	90-113	3	20
Barium	0.0100	U	0.0100	0.00033	mg/l	104	102	90-110	2	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	100	100	88-110	1	20
Boron	0.100	U	0.100	0.0084	mg/l	98	97	89-110	1	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	101	90-112	0	20
Calcium	0.400	U	0.400	0.0334	mg/l	105	102	90-110	3	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	102	102	90-110	0	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	103	102	90-110	0	20
Copper	0.0200	U	0.0200	0.0027	mg/l	97	97	90-112	0	20
Iron	0.400	U	0.400	0.0430	mg/l	102	99	90-112	3	20
Lead	0.0300	U	0.0300	0.0047	mg/l	105	104	88-110	1	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	99	90-110	3	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	100	90-110	3	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	103	103	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	107	107	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	104	90-111	0	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	103	103	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	100	98	85-115	2	20
Sodium	2.00	U	2.00	0.167	mg/l	101	99	87-114	2	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	101	90-110	1	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	105	104	90-113	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vanadium	0.0100 U	0.0100	0.0020	mg/l	106	105	90-110	1	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	103	102	90-110	0	20
Zirconium	0.100 U	0.100	0.0084	mg/l	105	102	90-110	3	20
Batch number: 131720639002A	Sample number(s): 7099654-7099655								
Silver	0.0010 U	0.0010	0.00011	mg/l	104	102	80-120	2	20
Strontium	0.0020 U	0.0020	0.00030	mg/l	104	99	80-120	4	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	98	100	80-120	2	20
Batch number: 131720639002B	Sample number(s): 7099654-7099655								
Selenium	0.0040 U	0.0040	0.00050	mg/l	109	109	80-120	0	20
Batch number: 131725713005	Sample number(s): 7099654-7099655								
3b Mercury 7470A	0.00020 U	0.00020	0.00007 0	mg/l	101	98	90-115	3	20
Batch number: 131770637001	Sample number(s): 7099657-7099664								
Aluminum	11.5 J	40.0	7.21	mg/kg	105		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	110		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	102		80-120		
Boron	1.25 J	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.1	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	106		80-120		
Iron	4.06 J	40.0	3.62	mg/kg	106		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	103		80-120		
Magnesium	1.74 J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U	100.	8.34	mg/kg	103		80-120		
Sodium	100 U	100.	16.7	mg/kg	102		80-120		
Tin	1.50 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.300 J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	105		80-120		
Batch number: 131770637001A	Sample number(s): 7099657-7099664								
Silver	0.200 U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.128 J	0.400	0.0520	mg/kg	110		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 131770637001B	Sample number(s): 7099657-7099664								
Selenium	0.400 U	0.400	0.100	mg/kg	109		80-120		
Batch number: 131780638001	Sample number(s): 7099657-7099664								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	109		85-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13171039402A	Sample number(s): 7099657-7099664								
15a pH by 9045D					100		95-105		
Batch number: 13171121521A	Sample number(s): 7099654-7099655								
28b pH (9040B and 9040C)					100		99-103		
Batch number: 13176162402B	Sample number(s): 7099657-7099664								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13175002	Sample number(s): 7099654-7099655									
2378-TCDD	2.00	U	2.00	0.241	pg/l	93		60-150		
12378-PeCDD	0.425	J	10.0	0.312	pg/l	97		60-150		
123478-HxCDD	0.302	J	10.0	0.199	pg/l	104		60-150		
123678-HxCDD	0.363	J	10.0	0.208	pg/l	102		60-150		
123789-HxCDD	0.412	J	10.0	0.208	pg/l	104		60-150		
1234678-HpCDD	0.662	J	10.0	0.204	pg/l	99		60-150		
OCDD	2.17	J	20.0	0.255	pg/l	100		60-150		
2378-TCDF	2.00	U	2.00	0.189	pg/l	97		60-150		
12378-PeCDF	0.995	J	10.0	0.149	pg/l	101		60-150		
23478-PeCDF	0.342	J	10.0	0.139	pg/l	101		60-150		
123478-HxCDF	0.472	J	10.0	0.0971	pg/l	104		60-150		
123678-HxCDF	0.342	J	10.0	0.0976	pg/l	102		60-150		
123789-HxCDF	0.509	J	10.0	0.100	pg/l	103		60-150		
234678-HxCDF	0.235	J	10.0	0.0978	pg/l	103		60-150		
1234678-HpCDF	0.488	J	10.0	0.100	pg/l	101		60-150		
1234789-HpCDF	0.650	J	10.0	0.114	pg/l	101		60-150		
OCDF	1.36	J	20.0	0.288	pg/l	102		60-150		
Batch number: 13178002	Sample number(s): 7099657-7099664									
2378-TCDD	1.00	U	1.00	0.0328	ng/kg	88		67-158		
12378-PeCDD	5.00	U	5.00	0.0373	ng/kg	97		70-142		
123478-HxCDD	5.00	U	5.00	0.0199	ng/kg	97		70-164		
123678-HxCDD	5.00	U	5.00	0.0209	ng/kg	97		76-134		
123789-HxCDD	0.0247	J	5.00	0.0205	ng/kg	94		64-162		
1234678-HpCDD	0.0676	J	5.00	0.0304	ng/kg	93		70-140		
OCDD	0.289	J	10.0	0.0337	ng/kg	94		78-144		
2378-TCDF	0.0378	J	1.00	0.0334	ng/kg	97		75-158		
2378-TCDF-Conf	0.0323	J	1.00	0.0299	ng/kg					
12378-PeCDF	0.0218	J	5.00	0.0214	ng/kg	96		80-134		
23478-PeCDF	0.0399	J	5.00	0.0223	ng/kg	98		68-160		
123478-HxCDF	0.0184	J	5.00	0.0130	ng/kg	94		72-134		
123678-HxCDF	0.0297	J	5.00	0.0113	ng/kg	95		84-130		
123789-HxCDF	5.00	U	5.00	0.0155	ng/kg	94		78-130		
234678-HxCDF	5.00	U	5.00	0.0118	ng/kg	97		70-156		
1234678-HpCDF	5.00	U	5.00	0.00860	ng/kg	93		82-122		
1234789-HpCDF	0.0365	J	5.00	0.0161	ng/kg	94		78-138		
OCDF	0.102	J	10.0	0.0456	ng/kg	92		63-170		
Batch number: 13175002	Sample number(s): 7099654-7099655									
TEQ WHO 2005 - EDLx0.0	0.0593				pg/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13178002	Sample number(s): 7099657-7099664								
TEQ WHO 2005 - EDLx0.0	0.000700			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13173SLC026	Sample number(s): 7099657-7099664 UNSPK: 7099657								
Acenaphthene	93	86	48-127	9	30				
Acenaphthylene	87	84	49-121	5	30				
Anthracene	82	77	52-126	6	30				
Benzo(a)anthracene	99	97	32-135	3	30				
Benzo(a)pyrene	97	89	36-138	9	30				
Benzo(b)fluoranthene	63	56	26-142	6	30				
Benzo(e)pyrene	106	101	70-130	5	30				
Benzo(g,h,i)perylene	62	50	33-141	15	30				
Benzo(k)fluoranthene	79	75	47-129	5	30				
Butylbenzylphthalate	0*	0*	59-153	0	30				
Di-n-butylphthalate	0*	0*	62-154	0	30				
Chrysene	41	28*	29-148	10	30				
Dibenz(a,h)anthracene	82	72	34-125	13	30				
Diethylphthalate	0*	0*	76-127	0	30				
Dimethylphthalate	0*	0*	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	-148*	-162*	47-135	8	30				
Fluorene	89	87	50-129	4	30				
Indeno(1,2,3-cd)pyrene	84	73	17-136	15	30				
1-Methylnaphthalene	97	93	50-131	5	30				
2-Methylnaphthalene	98	95	28-144	4	30				
Naphthalene	98	93	31-148	6	30				
N-Nitrosodimethylamine	82	73	48-113	12	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	-96*	-111*	29-142	11	30				
Pyrene	-83*	-95*	26-143	7	30				
Batch number: 13172A16A	Sample number(s): 7099659,7099661,7099663-7099664 UNSPK: P096473								
11a TPH by EPA 8015B GRO	102	91	39-118	4	30				
Batch number: 131730016A	Sample number(s): 7099657-7099664 UNSPK: P097885								
EFH (C12-C14)	83	92	49-123	11	20				
EFH (C15-C20)	115	134*	49-123	15	20				
EFH (C21-C30)	55	109	49-123	22*	20				
EFH (C30-C40)	100	237*	49-123	28*	20				
EFH (C8-C11)	68	78	49-123	14	20				
Batch number: 131770637001	Sample number(s): 7099657-7099664 UNSPK: P096473 BKG: P096473								

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Aluminum	1599 (2)	1728 (2)	75-125	1	20	21,700	21,600	0	20
Antimony	62*	63*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	93	91	75-125	1	20	10.3	10.7	4 (1)	20
Barium	97	101	75-125	3	20	120	127	6	20
Beryllium	96	98	75-125	2	20	1.03	1.06	2 (1)	20
Boron	92	93	75-125	0	20	1.23 J	9.90 U	200* (1)	20
Cadmium	94	94	75-125	0	20	0.990 U	0.107 J	200* (1)	20
Calcium	80 (2)	95 (2)	75-125	1	20	4,230	4,240	0	20
Chromium	96	103	75-125	3	20	34.6	34.1	1	20
Cobalt	91	89	75-125	2	20	8.26	10.8	27*	20
Copper	85	90	75-125	3	20	17.1	16.7	2	20
Iron	-2088 (2)	-864 (2)	75-125	4	20	34,000	35,200	3	20
Lead	88	88	75-125	0	20	11.2	12.6	12 (1)	20
Lithium	98	98	75-125	0	20	43.8	44.8	2	20
Magnesium	-83 (2)	13 (2)	75-125	3	20	7,670	7,720	1	20
Manganese	92 (2)	61 (2)	75-125	4	20	355	476	29*	20
Molybdenum	93	93	75-125	0	20	0.612 J	0.446 J	31* (1)	20
Nickel	90	91	75-125	1	20	22.2	24.5	10	20
Phosphorus	52 (2)	57 (2)	75-125	1	20	555	566	2	20
Potassium	138*	149*	75-125	3	20	2,820	2,830	1	20
Sodium	99	97	75-125	1	20	173	177	2 (1)	20
Tin	86	86	75-125	0	20	3.56 J	3.58 J	1 (1)	20
Titanium	251 (2)	296 (2)	75-125	3	20	1,460	1,450	1	20
Vanadium	97	101	75-125	2	20	56.9	57.1	0	20
Zinc	85	89	75-125	2	20	82.7	83.4	1	20
Zirconium	98	97	75-125	1	20	4.82 J	5.14	6 (1)	20
Batch number: 131770637001A	Sample number(s): 7099657-7099664 UNSPK: P096473 BKG: P096473								
Silver	105	102	75-125	3	20	0.198 U	0.198 U	0 (1)	20
Strontium	130*	90	75-125	8	20	31.3	31.0	1	20
Thallium	110	107	75-125	2	20	0.343	0.354	3 (1)	20
Batch number: 131770637001B	Sample number(s): 7099657-7099664 UNSPK: P096473 BKG: P096473								
Selenium	108	101	75-125	5	20	0.322 J	0.313 J	3 (1)	20
Batch number: 131780638001	Sample number(s): 7099657-7099664 UNSPK: P096473 BKG: P096473								
3a Mercury 7471A	115	112	65-135	1	20	0.0157 U	0.0164 U	0 (1)	20
Batch number: 13171039402A	Sample number(s): 7099657-7099664 BKG: 7099657								
15a pH by 9045D						6.52	6.53	0	3
Batch number: 13171121521A	Sample number(s): 7099654-7099655 BKG: P100401								
28b pH (9040B and 9040C)						7.8	7.8	0	3
Batch number: 13176162402B	Sample number(s): 7099657-7099664 BKG: 7099661								
14a Moisture Content by 160.3						4.0	3.8	4	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13173SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7099657	81	84	100
7099658	86	94	104
7099659	87	95	103
7099660	91	98	108
7099661	85	94	100
7099662	84	93	101
7099663	85	90	103
7099664	85	96	102
Blank	91	100	108
LCS	90	99	104
MS	79	83	95
MSD	77	78	93
Limits:	54-129	61-134	55-129

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13175WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7099654	94	99	99
7099655	91	89	98
Blank	85	95	91
LCS	96	103	106
LCSD	90	102	101
Limits:	64-120	62-141	58-134

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13172A16A

	Trifluorotoluene-F
7099659	81
7099661	83
7099663	84
7099664	85
Blank	90
LCS	87
MS	83
MSD	93
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13173A94A

	Trifluorotoluene-F
7099654	69

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Surrogate Quality Control

7099655	69
7099656	69
Blank	68
LCS	74
LCSD	81
Limits:	63-135

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131730016A

	Chlorobenzene	Orthoterphenyl
7099657	92	98
7099658	93	99
7099659	91	98
7099660	94	99
7099661	91	94
7099662	89	96
7099663	91	98
7099664	92	96
Blank	95	85
LCS	97	94
MS	87	91
MSD	89	95
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 131760025A

	Chlorobenzene	Orthoterphenyl
7099654	87	109
7099655	89	111
Blank	83	82
LCS	87	98
LCSD	85	96
Limits:	45-126	69-119

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13175002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7099654	55	57	59	59	63	62
7099655	62	72	83	83	85	86
Blank	58	62	74	72	72	82
OPR	72	77	88	87	86	96
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7099654	54	58	55	53	55	57
7099655	84	87	90	69	76	80
Blank	70	71	70	58	66	68
OPR	86	89	88	73	77	79

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7099654	55	51	48	56	54	
7099655	77	80	82	63	68	
Blank	67	65	63	60	60	
OPR	76	79	80	72	76	

Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13178002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7099657	78	83	77	79	78	83
7099658	82	83	81	82	85	88
7099659	69	81	76	79	80	79
7099660	74	78	78	80	84	87
7099661	72	84	81	83	85	98
7099662	80	89	80	80	85	97
7099663	67	72	70	75	75	80
7099664	78	89	83	89	93	94
Blank	77	77	75	87	81	74
OPR	72	74	76	83	79	76

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7099657	88	88	90	86	81	82
7099658	90	92	93	87	88	85
7099659	91	85	83	84	82	83
7099660	87	88	86	82	85	86
7099661	96	87	80	89	90	90
7099662	90	97	96	93	85	86
7099663	88	63	44	80	79	79
7099664	109	72	50	92	97	97
Blank	106	69	61	83	91	91
OPR	100	71	63	81	86	85

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	13C12-2378-TCDF-Conf
7099657	84	93	108		85	77
7099658	89	94	101	81	86	
7099659	85	93	93	67	83	
7099660	86	91	94	73	82	
7099661	92	96	94	77	88	
7099662	89	96	96	79	88	
7099663	80	81	78	65	78	
7099664	98	96	86	72	95	
Blank	93	94	86	68	89	69
OPR	88	88	83	66	82	66

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398465
Reported: 07/08/13 at 03:23 PM

Surrogate Quality Control

Limits:	28-130	23-140	17-157	24-169	24-185	24-169

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1398465 7099654-64

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/19/2013
CarrierName: FedEx
AirbillNo: 801785869928

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130619-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-061913	6/19/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-061913	6/19/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																								
EB1-061913	6/19/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB1-061913	6/19/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-061913	6/19/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
EB1-061913	6/19/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											

Special Instructions:

Sampler: Pa Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[illegible]	06/19/2013	1600									
									Pat H	6/20/13	0900

SSFL Phase 3 Chain of Custody

13013 1398465 7099654-64

CDM Smith

DateShipped: 6/19/2013
CarrierName: FedEx
AirbillNo: 801785869928

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130619-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB2-061913	6/19/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB2-061913	6/19/13 15:30	WQ	None	1 - 250 mL Amber	10 day							X																								
EB2-061913	6/19/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																						
EB2-061913	6/19/13 15:30	WQ	None	1 - 250 mL Poly	10 day														X																	
EB2-061913	6/19/13 15:30	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB2-061913	6/19/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																					X										

Special Instructions:

Sampler: Pam Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shipped	6/19/2013	1600									
									Pat H	6/20/13	0900

13013 1398465 7099654-64

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/19/2013
CarrierName: FedEx
AirbillNo: 801785869928

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130619-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-061913	6/19/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-859-SA5A-SB-0.0-0.5	6/19/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-859-SA5A-SB-0.0-0.5	6/19/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-863-SA5A-SB-0.0-0.5	6/19/13 09:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-863-SA5A-SB-0.0-0.5	6/19/13 09:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-863-SA5A-SB-4.0-5.0	6/19/13 09:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X							X											
SL-863-SA5A-SB-4.0-5.0	6/19/13 09:20	SO	None	2 - Encore	10 day																			X												
SL-866-SA5A-SB-0.0-0.5	6/19/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-866-SA5A-SB-0.0-0.5	6/19/13 10:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-866-SA5A-SB-5.5-6.5	6/19/13 11:15	SO	None	1 - 16 oz glass	10 day	X	X					X		X				X								X										
SL-866-SA5A-SB-5.5-6.5	6/19/13 11:15	SO	None	2 - Encore	10 day																			X												
SL-866-SA5A-SB-5.5-6.5	6/19/13 11:15	SO	None	1 - SS-Sleeve	10 day	X	X					X		X												X										
SL-865-SA5A-SB-0.0-0.5	6/19/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-865-SA5A-SB-0.0-0.5	6/19/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-865-SA5A-SB-4.0-5.0	6/19/13 13:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X								X										
SL-865-SA5A-SB-4.0-5.0	6/19/13 13:55	SO	None	2 - Encore	10 day																			X												
SL-865-SA5A-SB-9.0-10.0	6/19/13 14:10	SO	None	2 - 16 oz glass	10 day	X	X					X		X				X								X										
SL-865-SA5A-SB-9.0-10.0	6/19/13 14:10	SO	None	2 - Encore	10 day																			X												

COC Rev 2

Rec'd By: Pat Gu 6/20/13 0900

1 of 2

13013 1398465 7099654-64

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/19/2013
CarrierName: FedEx
AirbillNo: 801785869928

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130619-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler: V. Cordes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Shy Myree	6/19/2013	1600									
									Patsy	6/20/13	0900

Re 6/20/13

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Environmental Sample Administration Receipt Documentation Log 1398465

Client/Project: CDM Smith

Date of Receipt: 6/20/13

Time of Receipt: 0900

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.9	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3	↓	1.0	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 6/20/13 1025

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

July 02, 2013

Project: Phase 3 Subarea 5A

Submittal Date: 06/21/2013
Group Number: 1398848
SDG: PH061
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-062013 Water	7102685
SL-867-SA5A-SB-0.0-0.5 Soil	7102686
SL-867-SA5A-SB-3.5-4.5 Soil	7102687
SL-868-SA5A-SB-0.0-0.5 Soil	7102688
SL-868-SA5A-SB-4.0-5.0 Soil	7102689

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	LLI	Attn: Nicole Maljovec
ELECTRONIC COPY TO	Eurofins Lancaster Labs	Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB-062013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7102685
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:00

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB620 SDG#: PH061-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13175A94A	06/25/2013 14:52	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13175A94A	06/25/2013 14:52	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.8	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.8	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.8	10
12969	Benzo(b)fluoranthene	205-99-2	17	U	17	6.8	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.8	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.8	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	61	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	61	10
12969	Chrysene	218-01-9	4.9	J	17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.8	10
12969	Diethylphthalate	84-66-2	180	U	180	61	10
12969	Dimethylphthalate	131-11-3	180	U	180	61	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	61	10
12969	Fluoranthene	206-44-0	14	J	17	6.8	10
12969	Fluorene	86-73-7	17	U	17	6.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.8	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.8	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.8	10
12969	Naphthalene	91-20-3	17	U	17	6.8	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.8	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	61	10
12969	Phenanthrene	85-01-8	7.7	J	17	6.8	10
12969	Pyrene	129-00-0	11	J	17	6.8	10
Reporting limits were raised due to interference from the sample matrix.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	19		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	55		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,100		39.7	7.16	1
06944	Antimony	7440-36-0	3.97	U	3.97	0.735	1
06935	Arsenic	7440-38-2	6.86		3.97	0.696	1
06946	Barium	7440-39-3	108		0.994	0.0328	1
06947	Beryllium	7440-41-7	0.808	J	0.994	0.0666	1
07914	Boron	7440-42-8	2.10	J	9.94	0.835	1
06949	Cadmium	7440-43-9	0.162	J	0.994	0.0755	1
01650	Calcium	7440-70-2	2,540		19.9	3.32	1
06951	Chromium	7440-47-3	25.0		2.98	0.159	1
06952	Cobalt	7440-48-4	6.50		0.994	0.0984	1
06953	Copper	7440-50-8	8.50		1.99	0.288	1
01654	Iron	7439-89-6	24,100		39.7	3.60	1
06955	Lead	7439-92-1	11.1		2.98	0.497	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	25.3		4.0	0.34	1
01657	Magnesium	7439-95-4	4,870		9.94	1.66	1
06958	Manganese	7439-96-5	310		0.994	0.0825	1
06960	Molybdenum	7439-98-7	0.622	J	1.99	0.169	1
06961	Nickel	7440-02-0	15.6		1.99	0.129	1
10145	Phosphorus	7723-14-0	398		9.94	2.87	1
01662	Potassium	7440-09-7	3,810		99.4	8.29	1
01667	Sodium	7440-23-5	93.1	J	99.4	16.6	1
06969	Tin	7440-31-5	3.10	J	9.94	0.219	1
06970	Titanium	7440-32-6	1,250		0.994	0.169	1
06971	Vanadium	7440-62-2	46.9		0.994	0.129	1
06972	Zinc	7440-66-6	65.0		3.97	0.199	1
10146	Zirconium	7440-67-7	4.10	J	4.97	0.835	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.281	J	0.397	0.0994	2
06142	Silver	7440-22-4	0.0960	J	0.199	0.0258	2
06144	Strontium	7440-24-6	38.8		0.397	0.0517	2
06145	Thallium	7440-28-0	0.457		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0155	J	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.88		0.0100	0.0100	1
	The pH was measured in water at 22.1 C.						
	The sample was analyzed outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0729	JQ	1.02	0.0286	1
11031	12378-PeCDD	40321-76-4	0.746	JQ	5.09	0.0644	1
11031	123478-HxCDD	39227-28-6	1.74	J	5.09	0.0536	1
11031	123678-HxCDD	57653-85-7	3.73	J	5.09	0.0563	1
11031	123789-HxCDD	19408-74-3	2.78	JB	5.09	0.0536	1
11031	1234678-HpCDD	35822-46-9	125	B	5.09	0.114	1
11031	OCDD	3268-87-9	2,230	B	10.2	0.0756	1
11031	2378-TCDF	51207-31-9	0.328	JB	1.02	0.0656	1
11031	12378-PeCDF	57117-41-6	0.958	JB	5.09	0.0456	1
11031	23478-PeCDF	57117-31-4	0.702	JB	5.09	0.0441	1
11031	123478-HxCDF	70648-26-9	1.24	JB	5.09	0.0449	1
11031	123678-HxCDF	57117-44-9	0.852	JB	5.09	0.0448	1
11031	123789-HxCDF	72918-21-9	5.09	UQ	5.09	0.0478	1
11031	234678-HxCDF	60851-34-5	0.978	J	5.09	0.0411	1
11031	1234678-HpCDF	67562-39-4	21.4		5.09	0.0315	1
11031	1234789-HpCDF	55673-89-7	0.867	JB	5.09	0.0383	1
11031	OCDF	39001-02-0	27.9	B	10.2	0.0267	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	3.55				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	90	28 - 130
13C12-1234678-HpCDD	99	23 - 140
13C12-OCDD	109	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	88	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	94	26 - 138
13C12-OCDF	97	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 06:47	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 15:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 21:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 21:06	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:30	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:30	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:30	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:30	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 13:01	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102686
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-0 SDG#: PH061-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13175039401A	06/24/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.0	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.35	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.4	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.47
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	8.4		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	18		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,400		41.2	7.43	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	6.17		4.12	0.721	1
06946	Barium	7440-39-3	93.4		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.670	J	1.03	0.0690	1
07914	Boron	7440-42-8	2.11	J	10.3	0.865	1
06949	Cadmium	7440-43-9	0.214	J	1.03	0.0783	1
01650	Calcium	7440-70-2	2,460		20.6	3.44	1
06951	Chromium	7440-47-3	25.3		3.09	0.165	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.27		1.03	0.102	1
06953	Copper	7440-50-8	10.2		2.06	0.299	1
01654	Iron	7439-89-6	23,200		41.2	3.73	1
06955	Lead	7439-92-1	7.78		3.09	0.515	1
01656	Lithium	7439-93-2	27.9		4.1	0.35	1
01657	Magnesium	7439-95-4	5,030		10.3	1.72	1
06958	Manganese	7439-96-5	319		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.400	J	2.06	0.175	1
06961	Nickel	7440-02-0	16.8		2.06	0.134	1
10145	Phosphorus	7723-14-0	481		10.3	2.98	1
01662	Potassium	7440-09-7	3,540		103	8.59	1
01667	Sodium	7440-23-5	89.5	J	103	17.2	1
06969	Tin	7440-31-5	3.05	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,220		1.03	0.175	1
06971	Vanadium	7440-62-2	41.4		1.03	0.134	1
06972	Zinc	7440-66-6	63.7		4.12	0.206	1
10146	Zirconium	7440-67-7	2.89	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.186	J	0.412	0.103	2
06142	Silver	7440-22-4	0.0452	J	0.206	0.0268	2
06144	Strontium	7440-24-6	19.0		0.412	0.0536	2
06145	Thallium	7440-28-0	0.310		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.19		0.0100	0.0100	1
	The pH was measured in water at 23.2 C.						
	The sample was analyzed outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0288	JQ	0.983	0.0230	1
11031	12378-PeCDD	40321-76-4	0.0489	J	4.91	0.0246	1
11031	123478-HxCDD	39227-28-6	0.0955	JQ	4.91	0.0327	1
11031	123678-HxCDD	57653-85-7	0.227	JQ	4.91	0.0361	1
11031	123789-HxCDD	19408-74-3	0.210	JB	4.91	0.0349	1
11031	1234678-HpCDD	35822-46-9	5.45	B	4.91	0.0437	1
11031	OCDD	3268-87-9	114	B	9.83	0.0344	1
11031	2378-TCDF	51207-31-9	0.0263	JB	0.983	0.0256	1
11031	12378-PeCDF	57117-41-6	0.138	JB	4.91	0.0171	1
11031	23478-PeCDF	57117-31-4	0.0837	JBQ	4.91	0.0171	1
11031	123478-HxCDF	70648-26-9	0.115	JBQ	4.91	0.0170	1
11031	123678-HxCDF	57117-44-9	0.0421	JBQ	4.91	0.0157	1
11031	123789-HxCDF	72918-21-9	0.147	JQ	4.91	0.0184	1
11031	234678-HxCDF	60851-34-5	0.0594	JQ	4.91	0.0143	1
11031	1234678-HpCDF	67562-39-4	0.869	J	4.91	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0409	JB	4.91	0.0179	1
11031	OCDF	39001-02-0	1.28	JB	9.83	0.0262	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.175				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 07:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13177A16A	06/26/2013 20:57	Laura M Krieger	27.47
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317231492	06/21/2013 15:40	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317231492	06/21/2013 15:40	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 13:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 22:43	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 21:10	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:32	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:32	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:32	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-867-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102687
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 08:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

867-3 SDG#: PH061-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:32	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 13:03	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13175039401A	06/24/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.7	10
12969	Acenaphthylene	208-96-8	17	U	17	3.3	10
12969	Anthracene	120-12-7	17	U	17	3.3	10
12969	Benzo(a)anthracene	56-55-3	17	U	17	6.7	10
12969	Benzo(a)pyrene	50-32-8	17	U	17	6.7	10
12969	Benzo(b)fluoranthene	205-99-2	17	U	17	6.7	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	33	10
12969	Benzo(g,h,i)perylene	191-24-2	17	U	17	6.7	10
12969	Benzo(k)fluoranthene	207-08-9	17	U	17	6.7	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	60	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	60	10
12969	Chrysene	218-01-9	5.9	J	17	3.3	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.7	10
12969	Diethylphthalate	84-66-2	180	U	180	60	10
12969	Dimethylphthalate	131-11-3	180	U	180	60	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	60	10
12969	Fluoranthene	206-44-0	12	J	17	6.7	10
12969	Fluorene	86-73-7	17	U	17	6.7	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.7	10
12969	1-Methylnaphthalene	90-12-0	17	U	17	6.7	10
12969	2-Methylnaphthalene	91-57-6	17	U	17	6.7	10
12969	Naphthalene	91-20-3	17	U	17	6.7	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.7	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	60	10
12969	Phenanthrene	85-01-8	17	U	17	6.7	10
12969	Pyrene	129-00-0	10	J	17	6.7	10
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	9.9		5.0	2.0	1
12952	EFH (C30-C40)	n.a.	26		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,200		39.5	7.12	1
06944	Antimony	7440-36-0	3.95	U	3.95	0.730	1
06935	Arsenic	7440-38-2	6.08		3.95	0.691	1
06946	Barium	7440-39-3	101		0.987	0.0326	1
06947	Beryllium	7440-41-7	0.766	J	0.987	0.0661	1
07914	Boron	7440-42-8	3.01	J	9.87	0.829	1
06949	Cadmium	7440-43-9	0.185	J	0.987	0.0750	1
01650	Calcium	7440-70-2	2,650		19.7	3.30	1
06951	Chromium	7440-47-3	26.0		2.96	0.158	1
06952	Cobalt	7440-48-4	5.90		0.987	0.0977	1
06953	Copper	7440-50-8	9.09		1.97	0.286	1
01654	Iron	7439-89-6	22,800		39.5	3.57	1
06955	Lead	7439-92-1	9.74		2.96	0.493	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	26.8		3.9	0.34	1
01657	Magnesium	7439-95-4	5,000		9.87	1.65	1
06958	Manganese	7439-96-5	277		0.987	0.0819	1
06960	Molybdenum	7439-98-7	0.560	J	1.97	0.168	1
06961	Nickel	7440-02-0	16.5		1.97	0.128	1
10145	Phosphorus	7723-14-0	381		9.87	2.85	1
01662	Potassium	7440-09-7	2,870		98.7	8.23	1
01667	Sodium	7440-23-5	87.8	J	98.7	16.5	1
06969	Tin	7440-31-5	2.98	J	9.87	0.217	1
06970	Titanium	7440-32-6	1,220		0.987	0.168	1
06971	Vanadium	7440-62-2	44.7		0.987	0.128	1
06972	Zinc	7440-66-6	57.4		3.95	0.197	1
10146	Zirconium	7440-67-7	3.41	J	4.93	0.829	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.237	J	0.395	0.0987	2
06142	Silver	7440-22-4	0.0722	J	0.197	0.0257	2
06144	Strontium	7440-24-6	28.8		0.395	0.0513	2
06145	Thallium	7440-28-0	0.377		0.197	0.0296	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0156	J	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.59		0.0100	0.0100	1
	The pH was measured in water at 22.4 C.						
	The sample was analyzed outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	0.66		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.167	JQ	1.00	0.0294	1
11031	12378-PeCDD	40321-76-4	0.618	J	5.00	0.0593	1
11031	123478-HxCDD	39227-28-6	1.64	J	5.00	0.0676	1
11031	123678-HxCDD	57653-85-7	3.21	J	5.00	0.0706	1
11031	123789-HxCDD	19408-74-3	2.48	JB	5.00	0.0659	1
11031	1234678-HpCDD	35822-46-9	127	B	5.00	0.135	1
11031	OCDD	3268-87-9	2,300	B	10.0	0.0905	1
11031	2378-TCDF	51207-31-9	0.218	JB	1.00	0.0547	1
11031	12378-PeCDF	57117-41-6	0.997	JB	5.00	0.0416	1
11031	23478-PeCDF	57117-31-4	0.426	JB	5.00	0.0404	1
11031	123478-HxCDF	70648-26-9	1.18	JB	5.00	0.0388	1
11031	123678-HxCDF	57117-44-9	0.816	JB	5.00	0.0358	1
11031	123789-HxCDF	72918-21-9	5.00	U	5.00	0.0354	1
11031	234678-HxCDF	60851-34-5	0.996	J	5.00	0.0331	1
11031	1234678-HpCDF	67562-39-4	18.6		5.00	0.0295	1
11031	1234789-HpCDF	55673-89-7	0.848	JB	5.00	0.0431	1
11031	OCDF	39001-02-0	25.8	B	10.0	0.0382	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	4.00				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	92	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 07:51	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 13:52	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/29/2013 23:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 21:14	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:35	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:35	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:35	Choon Y Tian	2
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:35	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 13:05	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102688
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 09:50 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-0 SDG#: PH061-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13175039401A	06/24/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	0.73	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	0.85	J	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.72
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,600		40.4	7.28	1
06944	Antimony	7440-36-0	4.04	U	4.04	0.747	1
06935	Arsenic	7440-38-2	7.63		4.04	0.707	1
06946	Barium	7440-39-3	94.8		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.726	J	1.01	0.0676	1
07914	Boron	7440-42-8	1.69	J	10.1	0.848	1
06949	Cadmium	7440-43-9	0.198	J	1.01	0.0767	1
01650	Calcium	7440-70-2	3,150		20.2	3.37	1
06951	Chromium	7440-47-3	28.4		3.03	0.162	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	6.69		1.01	0.100	1
06953	Copper	7440-50-8	12.2		2.02	0.293	1
01654	Iron	7439-89-6	25,600		40.4	3.66	1
06955	Lead	7439-92-1	7.99		3.03	0.505	1
01656	Lithium	7439-93-2	29.2		4.0	0.34	1
01657	Magnesium	7439-95-4	5,630		10.1	1.69	1
06958	Manganese	7439-96-5	322		1.01	0.0838	1
06960	Molybdenum	7439-98-7	0.354	J	2.02	0.172	1
06961	Nickel	7440-02-0	18.0		2.02	0.131	1
10145	Phosphorus	7723-14-0	517		10.1	2.92	1
01662	Potassium	7440-09-7	3,000		101	8.42	1
01667	Sodium	7440-23-5	89.9	J	101	16.9	1
06969	Tin	7440-31-5	3.02	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,230		1.01	0.172	1
06971	Vanadium	7440-62-2	46.6		1.01	0.131	1
06972	Zinc	7440-66-6	65.3		4.04	0.202	1
10146	Zirconium	7440-67-7	3.60	J	5.05	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.248	J	0.404	0.101	2
06142	Silver	7440-22-4	0.0684	J	0.202	0.0263	2
06144	Strontium	7440-24-6	34.4		0.404	0.0525	2
06145	Thallium	7440-28-0	0.459		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.65		0.0100	0.0100	1
	The pH was measured in water at 22.3 C.						
	The sample was analyzed outside of the project required 48 hour holding time.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02 U	1.02	0.0296	1
11031	12378-PeCDD	40321-76-4	0.0377 JQ	5.11	0.0348	1
11031	123478-HxCDD	39227-28-6	0.0870 J	5.11	0.0395	1
11031	123678-HxCDD	57653-85-7	0.193 JQ	5.11	0.0434	1
11031	123789-HxCDD	19408-74-3	0.221 JBQ	5.11	0.0423	1
11031	1234678-HpCDD	35822-46-9	4.93 JB	5.11	0.0543	1
11031	OCDD	3268-87-9	74.9 B	10.2	0.0343	1
11031	2378-TCDF	51207-31-9	0.0357 JBQ	1.02	0.0303	1
11031	12378-PeCDF	57117-41-6	0.113 JBQ	5.11	0.0218	1
11031	23478-PeCDF	57117-31-4	0.0812 JBQ	5.11	0.0218	1
11031	123478-HxCDF	70648-26-9	0.0839 JBQ	5.11	0.0194	1
11031	123678-HxCDF	57117-44-9	0.0479 JBQ	5.11	0.0179	1
11031	123789-HxCDF	72918-21-9	0.111 J	5.11	0.0209	1
11031	234678-HxCDF	60851-34-5	0.0641 JQ	5.11	0.0173	1
11031	1234678-HpCDF	67562-39-4	0.636 JQ	5.11	0.0159	1
11031	1234789-HpCDF	55673-89-7	0.0687 JBQ	5.11	0.0237	1
11031	OCDF	39001-02-0	0.918 JB	10.2	0.0309	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0917			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13173SLC026	06/29/2013 08:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13173SLC026	06/23/2013 07:30	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13177A16A	06/26/2013 21:35	Laura M Krieger	25.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201317231492	06/21/2013 15:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201317231492	06/21/2013 15:41	Mitchell R Washel	n.a.
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	131730016A	06/25/2013 09:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	131730016A	06/24/2013 11:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13178002	06/30/2013 00:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13178002	06/27/2013 16:00	Deborah M Zimmerman	1
01643	Aluminum	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06944	Antimony	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06935	Arsenic	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06946	Barium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06947	Beryllium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
07914	Boron	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06949	Cadmium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01650	Calcium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06951	Chromium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06952	Cobalt	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06953	Copper	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01654	Iron	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06955	Lead	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01656	Lithium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01657	Magnesium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06958	Manganese	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06960	Molybdenum	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06961	Nickel	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
10145	Phosphorus	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01662	Potassium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
01667	Sodium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06969	Tin	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06970	Titanium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06971	Vanadium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06972	Zinc	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
10146	Zirconium	SW-846 6010C	1	131770637001	06/27/2013 21:18	John P Hook	1
06141	Selenium	SW-846 6020A	1	131770637001B	06/27/2013 09:37	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	131770637001A	06/27/2013 09:37	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	131770637001A	06/27/2013 09:37	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-868-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7102689
LL Group # 1398848
Account # 13013

Project Name: Phase 3 Subarea 5A

Collected: 06/20/2013 10:25 by VC

Submitted: 06/21/2013 09:05
Reported: 07/02/2013 10:24

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

868-4 SDG#: PH061-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	131770637001A	06/27/2013 09:37	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	131780638001	06/28/2013 13:07	Parker D Lindstrom	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	131770637001	06/26/2013 23:29	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	131770638001	06/27/2013 03:10	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	2	131780638001	06/27/2013 23:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13175039401A	06/24/2013 22:30	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	2	13176162401B	06/25/2013 10:58	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13173SLC026	Sample number(s): 7102686-7102689									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	97		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	101		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	98		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	99		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	114		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	114		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	103		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	109		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	98		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	112		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	89		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	116		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	98		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Batch number: 13175A94A	Sample number(s): 7102685									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	107	75-135	2	30
Batch number: 13177A16A	Sample number(s): 7102687,7102689									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92	91	67-119	1	30
Batch number: 131730016A	Sample number(s): 7102686-7102689									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	98		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	110		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	107		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	100		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	82		49-107		
Batch number: 131770637001	Sample number(s): 7102686-7102689									
Aluminum	11.5	J	40.0	7.21	mg/kg	105		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	110		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Arsenic	4.00	U	4.00	0.700	mg/kg	102		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	102		80-120		
Boron	1.25	J	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	104		80-120		
Calcium	20.1		20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	104		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	106		80-120		
Iron	4.06	J	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	1.74	J	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	103		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.50	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	105		80-120		
Zinc	0.300	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 131770637001A	Sample number(s): 7102686-7102689									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.128	J	0.400	0.0520	mg/kg	110		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	113		80-120		
Batch number: 131770637001B	Sample number(s): 7102686-7102689									
Selenium	0.400	U	0.400	0.100	mg/kg	109		80-120		
Batch number: 131780638001	Sample number(s): 7102686-7102689									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	109		85-120		
Batch number: 13175039401A	Sample number(s): 7102686-7102689									
15a pH by 9045D						100		95-105		
Batch number: 13176162401B	Sample number(s): 7102686-7102689									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13178002	Sample number(s): 7102686-7102689									
2378-TCDD	1.00	U	1.00	0.0328	ng/kg	88		67-158		
12378-PeCDD	5.00	U	5.00	0.0373	ng/kg	97		70-142		
123478-HxCDD	5.00	U	5.00	0.0199	ng/kg	97		70-164		
123678-HxCDD	5.00	U	5.00	0.0209	ng/kg	97		76-134		
123789-HxCDD	0.0247	J	5.00	0.0205	ng/kg	94		64-162		
1234678-HpCDD	0.0676	J	5.00	0.0304	ng/kg	93		70-140		
OCDD	0.289	J	10.0	0.0337	ng/kg	94		78-144		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
2378-TCDF	0.0378 J	1.00	0.0334	ng/kg	97		75-158		
12378-PeCDF	0.0218 J	5.00	0.0214	ng/kg	96		80-134		
23478-PeCDF	0.0399 J	5.00	0.0223	ng/kg	98		68-160		
123478-HxCDF	0.0184 J	5.00	0.0130	ng/kg	94		72-134		
123678-HxCDF	0.0297 J	5.00	0.0113	ng/kg	95		84-130		
123789-HxCDF	5.00 U	5.00	0.0155	ng/kg	94		78-130		
234678-HxCDF	5.00 U	5.00	0.0118	ng/kg	97		70-156		
1234678-HpCDF	5.00 U	5.00	0.00860	ng/kg	93		82-122		
1234789-HpCDF	0.0365 J	5.00	0.0161	ng/kg	94		78-138		
OCDF	0.102 J	10.0	0.0456	ng/kg	92		63-170		
TEQ WHO 2005 - EDLx0.0	0.000700			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13173SLC026	Sample number(s): 7102686-7102689 UNSPK: P099657								
Acenaphthene	93	86	48-127	9	30				
Acenaphthylene	87	84	49-121	5	30				
Anthracene	82	77	52-126	6	30				
Benzo(a)anthracene	99	97	32-135	3	30				
Benzo(a)pyrene	97	89	36-138	9	30				
Benzo(b)fluoranthene	63	56	26-142	6	30				
Benzo(e)pyrene	106	101	70-130	5	30				
Benzo(g,h,i)perylene	62	50	33-141	15	30				
Benzo(k)fluoranthene	79	75	47-129	5	30				
Butylbenzylphthalate	0*	0*	59-153	0	30				
Di-n-butylphthalate	0*	0*	62-154	0	30				
Chrysene	41	28*	29-148	10	30				
Dibenz(a,h)anthracene	82	72	34-125	13	30				
Diethylphthalate	0*	0*	76-127	0	30				
Dimethylphthalate	0*	0*	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	-148*	-162*	47-135	8	30				
Fluorene	89	87	50-129	4	30				
Indeno(1,2,3-cd)pyrene	84	73	17-136	15	30				
1-Methylnaphthalene	97	93	50-131	5	30				
2-Methylnaphthalene	98	95	28-144	4	30				
Naphthalene	98	93	31-148	6	30				
N-Nitrosodimethylamine	82	73	48-113	12	30				
Di-n-octylphthalate	0*	0*	52-162	0	30				
Phenanthrene	-96*	-111*	29-142	11	30				
Pyrene	-83*	-95*	26-143	7	30				
Batch number: 131730016A	Sample number(s): 7102686-7102689 UNSPK: P097885								
EFH (C12-C14)	83	92	49-123	11	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C15-C20)	115	134*	49-123	15	20				
EFH (C21-C30)	55	109	49-123	22*	20				
EFH (C30-C40)	100	237*	49-123	28*	20				
EFH (C8-C11)	68	78	49-123	14	20				
Batch number: 131770637001	Sample number(s): 7102686-7102689 UNSPK: P096473 BKG: P096473								
Aluminum	1599 (2)	1728 (2)	75-125	1	20	21,700	21,600	0	20
Antimony	62*	63*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	93	91	75-125	1	20	10.3	10.7	4 (1)	20
Barium	97	101	75-125	3	20	120	127	6	20
Beryllium	96	98	75-125	2	20	1.03	1.06	2 (1)	20
Boron	92	93	75-125	0	20	1.23 J	9.90 U	200* (1)	20
Cadmium	94	94	75-125	0	20	0.990 U	0.107 J	200* (1)	20
Calcium	80 (2)	95 (2)	75-125	1	20	4,230	4,240	0	20
Chromium	96	103	75-125	3	20	34.6	34.1	1	20
Cobalt	91	89	75-125	2	20	8.26	10.8	27*	20
Copper	85	90	75-125	3	20	17.1	16.7	2	20
Iron	-2088 (2)	-864 (2)	75-125	4	20	34,000	35,200	3	20
Lead	88	88	75-125	0	20	11.2	12.6	12 (1)	20
Lithium	98	98	75-125	0	20	43.8	44.8	2	20
Magnesium	-83 (2)	13 (2)	75-125	3	20	7,670	7,720	1	20
Manganese	92 (2)	61 (2)	75-125	4	20	355	476	29*	20
Molybdenum	93	93	75-125	0	20	0.612 J	0.446 J	31* (1)	20
Nickel	90	91	75-125	1	20	22.2	24.5	10	20
Phosphorus	52 (2)	57 (2)	75-125	1	20	555	566	2	20
Potassium	138*	149*	75-125	3	20	2,820	2,830	1	20
Sodium	99	97	75-125	1	20	173	177	2 (1)	20
Tin	86	86	75-125	0	20	3.56 J	3.58 J	1 (1)	20
Titanium	251 (2)	296 (2)	75-125	3	20	1,460	1,450	1	20
Vanadium	97	101	75-125	2	20	56.9	57.1	0	20
Zinc	85	89	75-125	2	20	82.7	83.4	1	20
Zirconium	98	97	75-125	1	20	4.82 J	5.14	6 (1)	20
Batch number: 131770637001A	Sample number(s): 7102686-7102689 UNSPK: P096473 BKG: P096473								
Silver	105	102	75-125	3	20	0.198 U	0.198 U	0 (1)	20
Strontium	130*	90	75-125	8	20	31.3	31.0	1	20
Thallium	110	107	75-125	2	20	0.343	0.354	3 (1)	20
Batch number: 131770637001B	Sample number(s): 7102686-7102689 UNSPK: P096473 BKG: P096473								
Selenium	108	101	75-125	5	20	0.322 J	0.313 J	3 (1)	20
Batch number: 131780638001	Sample number(s): 7102686-7102689 UNSPK: P096473 BKG: P096473								
3a Mercury 7471A	115	112	65-135	1	20	0.0157 U	0.0164 U	0 (1)	20
Batch number: 13175039401A	Sample number(s): 7102686-7102689 BKG: 7102686								
15a pH by 9045D						6.88	6.88	0	3
Batch number: 13176162401B	Sample number(s): 7102686-7102689 BKG: P096473								
14a Moisture Content by 160.3						4.6	4.7	2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13173SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7102686	78	88	95
7102687	86	94	101
7102688	82	91	100
7102689	83	91	100
Blank	91	100	108
LCS	90	99	104
MS	79	83	95
MSD	77	78	93
Limits:	54-129	61-134	55-129

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13175A94A

	Trifluorotoluene-F
7102685	71
Blank	67
LCS	83
LCSD	83
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13177A16A

	Trifluorotoluene-F
7102687	93
7102689	94
Blank	93
LCS	95
LCSD	95
Limits:	61-122

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 131730016A

	Chlorobenzene	Orthoterphenyl
7102686	88	97
7102687	93	100
7102688	86	93
7102689	87	95
Blank	95	85
LCS	97	94
MS	87	91

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1398848
Reported: 07/02/13 at 10:24 AM

Surrogate Quality Control

MSD	89	95
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13178002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7102686	81	88	80	81	88	87
7102687	74	77	74	80	87	78
7102688	83	84	74	79	85	93
7102689	62	67	69	74	81	71
Blank	77	77	75	87	81	74
OPR	72	74	76	83	79	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7102686	96	94	97	90	88	88
7102687	90	76	74	80	87	86
7102688	93	76	70	87	88	87
7102689	91	73	74	71	82	81
Blank	106	69	61	83	91	91
OPR	100	71	63	81	86	85
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7102686	90	99	109	80	90
7102687	86	84	86	72	82
7102688	89	88	85	75	92
7102689	81	82	90	61	73
Blank	93	94	86	68	89
OPR	88	88	83	66	82
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Ap#1398848 sample#7102685-89

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 6/20/2013
CarrierName: FedEx
AirbillNo: 796051165420

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130620-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-062013	6/20/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-867-SA5A-SB-0.0-0.5	6/20/13 08:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-867-SA5A-SB-0.0-0.5	6/20/13 08:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-867-SA5A-SB-3.5-4.5	6/20/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-867-SA5A-SB-3.5-4.5	6/20/13 08:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-867-SA5A-SB-3.5-4.5	6/20/13 08:50	SO	None	2 - Encore	10 day																			X												
SL-868-SA5A-SB-0.0-0.5	6/20/13 09:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-868-SA5A-SB-0.0-0.5	6/20/13 09:50	SO	None	1 - 4 oz glass	10 day													X																		
SL-868-SA5A-SB-4.0-5.0	6/20/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X					X		X												X										
SL-868-SA5A-SB-4.0-5.0	6/20/13 10:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-868-SA5A-SB-4.0-5.0	6/20/13 10:25	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler: V. Cortes

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
[signature]	6/20/2013	1600									
									[signature] 6.21.13	905	

COC Rev 2

COC: 20130620-01, Page 1 of 1

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G# 1398848

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 6.21.13

Time of Receipt: 905

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.0	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: (0)

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 2299 **Date/Time:** 6.21.13 958

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 12, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/30/2013
Group Number: 1407677
SDG: PH077
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB2-072913 Water	7143794
SL-853-SA5A-SB-0.0-0.5 Soil	7143795
SL-853-SA5A-SB-3.5-4.5 Soil	7143796
SL-851-SA5A-SB-0.0-0.5 Soil	7143797
SL-849-SA5A-SB-0.0-0.5 Soil	7143798

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: TB2-072913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7143794
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB729 SDG#: PH077-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13213A20A	08/01/2013 19:33	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13213A20A	08/01/2013 19:33	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	2.6	U	2.6	1.0	1
12969	Acenaphthylene	208-96-8	2.6	U	2.6	0.51	1
12969	Anthracene	120-12-7	2.6	U	2.6	0.51	1
12969	Benzo(a)anthracene	56-55-3	2.6	U	2.6	1.0	1
12969	Benzo(a)pyrene	50-32-8	2.6	U	2.6	1.0	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	2.6	1.0	1
12969	Benzo(e)pyrene	192-97-2	26	U	26	5.1	1
12969	Benzo(g,h,i)perylene	191-24-2	2.6	U	2.6	1.0	1
12969	Benzo(k)fluoranthene	207-08-9	2.6	U	2.6	1.0	1
12969	Butylbenzylphthalate	85-68-7	28	U	28	9.2	1
12969	Di-n-butylphthalate	84-74-2	28	U	28	9.2	1
12969	Chrysene	218-01-9	1.6	J	2.6	0.51	1
12969	Dibenz(a,h)anthracene	53-70-3	2.6	U	2.6	1.0	1
12969	Diethylphthalate	84-66-2	28	U	28	9.2	1
12969	Dimethylphthalate	131-11-3	28	U	28	9.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	28	U	28	9.2	1
12969	Fluoranthene	206-44-0	1.6	J	2.6	1.0	1
12969	Fluorene	86-73-7	2.6	U	2.6	1.0	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.6	U	2.6	1.0	1
12969	1-Methylnaphthalene	90-12-0	2.6	U	2.6	1.0	1
12969	2-Methylnaphthalene	91-57-6	2.6	U	2.6	1.0	1
12969	Naphthalene	91-20-3	2.6	U	2.6	1.0	1
12969	N-Nitrosodimethylamine	62-75-9	2.6	U	2.6	1.0	1
12969	Di-n-octylphthalate	117-84-0	28	U	28	9.2	1
12969	Phenanthrene	85-01-8	1.1	J	2.6	1.0	1
12969	Pyrene	129-00-0	1.3	J	2.6	1.0	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	33	U	33	10	1
10592	Aroclor 5442	12642-23-8	33	U	33	10	1
10592	Aroclor 5460	11126-42-4	33	U	33	10	1
10592	PCB-1016	12674-11-2	17	U	17	3.3	1
10592	PCB-1221	11104-28-2	17	U	17	5.1	1
10592	PCB-1232	11141-16-5	17	U	17	4.1	1
10592	PCB-1242	53469-21-9	17	U	17	4.1	1
10592	PCB-1248	12672-29-6	17	U	17	3.3	1
10592	PCB-1254	11097-69-1	17	U	17	4.4	1
10592	PCB-1260	11096-82-5	17	U	17	3.9	1
10592	PCB-1262	37324-23-5	17	U	17	3.3	1
10592	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.7		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	20		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	3.79	J	4.09	0.716	1
06946	Barium	7440-39-3	108		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.633	J	1.02	0.0685	1
07914	Boron	7440-42-8	7.21	J	10.2	0.859	1
06949	Cadmium	7440-43-9	0.236	J	1.02	0.0777	1
01650	Calcium	7440-70-2	2,410		20.4	3.42	1
06951	Chromium	7440-47-3	21.1		3.07	0.164	1
06952	Cobalt	7440-48-4	5.37		1.02	0.101	1
06953	Copper	7440-50-8	12.1		2.04	0.297	1
01654	Iron	7439-89-6	20,200		40.9	3.70	1
06955	Lead	7439-92-1	8.00		3.07	0.511	1
01656	Lithium	7439-93-2	20.8		4.1	0.35	1
01657	Magnesium	7439-95-4	4,220		10.2	1.71	1
06958	Manganese	7439-96-5	323		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.436	J	2.04	0.174	1
06961	Nickel	7440-02-0	12.9		2.04	0.133	1
10145	Phosphorus	7723-14-0	393		10.2	2.96	1
01662	Potassium	7440-09-7	3,710		102	8.53	1
01667	Sodium	7440-23-5	75.8	J	102	17.1	1
06969	Tin	7440-31-5	2.65	J	10.2	0.225	1
06970	Titanium	7440-32-6	970		1.02	0.174	1
06971	Vanadium	7440-62-2	36.1		1.02	0.133	1
06972	Zinc	7440-66-6	58.7		4.09	0.204	1
10146	Zirconium	7440-67-7	4.00	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.132	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0570	J	0.204	0.0266	2
06144	Strontium	7440-24-6	25.5		0.409	0.0695	2
06145	Thallium	7440-28-0	0.300		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0159	U	0.0159	0.0095	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.43		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0235	1
11031	12378-PeCDD	40321-76-4	0.166	JQ	5.06	0.0290	1
11031	123478-HxCDD	39227-28-6	0.259	JB	5.06	0.0378	1
11031	123678-HxCDD	57653-85-7	0.690	JB	5.06	0.0419	1
11031	123789-HxCDD	19408-74-3	0.803	JB	5.06	0.0408	1
11031	1234678-HpCDD	35822-46-9	13.7	B	5.06	0.0441	1
11031	OCDD	3268-87-9	212	B	10.1	0.0340	1
11031	2378-TCDF	51207-31-9	0.0650	J	1.01	0.0320	1
11031	12378-PeCDF	57117-41-6	0.327	JB	5.06	0.0203	1
11031	23478-PeCDF	57117-31-4	0.123	JBQ	5.06	0.0188	1
11031	123478-HxCDF	70648-26-9	0.160	JBQ	5.06	0.0207	1
11031	123678-HxCDF	57117-44-9	0.178	JB	5.06	0.0200	1
11031	123789-HxCDF	72918-21-9	0.254	JB	5.06	0.0245	1
11031	234678-HxCDF	60851-34-5	0.168	JB	5.06	0.0200	1
11031	1234678-HpCDF	67562-39-4	1.72	JB	5.06	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.218	JBQ	5.06	0.0233	1
11031	OCDF	39001-02-0	5.14	JB	10.1	0.0253	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.471				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 03:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 00:13	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 16:59	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 17:50	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132180637001	08/08/2013 01:46	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132180637001B	08/08/2013 08:39	Choon Y Tian	2
06142	Silver	SW-846 6020A	1	132180637001A	08/08/2013 08:39	Choon Y Tian	2
06144	Strontium	SW-846 6020A	1	132180637001A	08/08/2013 08:39	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143795
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:00 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85300 SDG#: PH077-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	132180637001A	08/08/2013 08:39	Choon Y Tian	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132180637001	08/07/2013 09:50	Denise K Conners	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
10592	Aroclor 5432	63496-31-1	35	U	35	11	1
10592	Aroclor 5442	12642-23-8	35	U	35	11	1
10592	Aroclor 5460	11126-42-4	35	U	35	11	1
10592	PCB-1016	12674-11-2	18	U	18	3.5	1
10592	PCB-1221	11104-28-2	18	U	18	5.4	1
10592	PCB-1232	11141-16-5	18	U	18	4.4	1
10592	PCB-1242	53469-21-9	18	U	18	4.4	1
10592	PCB-1248	12672-29-6	18	U	18	3.5	1
10592	PCB-1254	11097-69-1	18	U	18	4.7	1
10592	PCB-1260	11096-82-5	18	U	18	4.1	1
10592	PCB-1262	37324-23-5	18	U	18	3.5	1
10592	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,700		41.6	7.49	1
06944	Antimony	7440-36-0	4.16	U	4.16	0.769	1
06935	Arsenic	7440-38-2	4.95		4.16	0.728	1
06946	Barium	7440-39-3	91.3		1.04	0.0343	1
06947	Beryllium	7440-41-7	0.753	J	1.04	0.0696	1
07914	Boron	7440-42-8	10.4	U	10.4	0.873	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0790	1
01650	Calcium	7440-70-2	2,350		20.8	3.47	1
06951	Chromium	7440-47-3	23.7		3.12	0.166	1
06952	Cobalt	7440-48-4	6.17		1.04	0.103	1
06953	Copper	7440-50-8	14.9		2.08	0.301	1
01654	Iron	7439-89-6	23,900		41.6	3.76	1
06955	Lead	7439-92-1	6.35		3.12	0.520	1
01656	Lithium	7439-93-2	30.3		4.2	0.35	1
01657	Magnesium	7439-95-4	4,950		10.4	1.74	1
06958	Manganese	7439-96-5	350		1.04	0.0863	1
06960	Molybdenum	7439-98-7	0.938	J	2.08	0.177	1
06961	Nickel	7440-02-0	13.7		2.08	0.135	1
10145	Phosphorus	7723-14-0	267		10.4	3.00	1
01662	Potassium	7440-09-7	2,430		104	8.67	1
01667	Sodium	7440-23-5	140		104	17.4	1
06969	Tin	7440-31-5	2.88	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,170		1.04	0.177	1
06971	Vanadium	7440-62-2	42.6		1.04	0.135	1
06972	Zinc	7440-66-6	52.6		4.16	0.208	1
10146	Zirconium	7440-67-7	5.20	U	5.20	0.873	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.139	J	0.416	0.104	2
06142	Silver	7440-22-4	0.0451	J	0.208	0.0270	2
06144	Strontium	7440-24-6	19.3		0.416	0.0707	2
06145	Thallium	7440-28-0	0.273		0.208	0.0312	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.43		0.0100	0.0100	1
	The pH was measured in water at 21.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0279 JBQ	1.08	0.0243	1
11031	12378-PeCDD	40321-76-4	0.106 JQ	5.39	0.0274	1
11031	123478-HxCDD	39227-28-6	0.0773 JBQ	5.39	0.0181	1
11031	123678-HxCDD	57653-85-7	0.0799 JBQ	5.39	0.0194	1
11031	123789-HxCDD	19408-74-3	0.0809 JB	5.39	0.0190	1
11031	1234678-HpCDD	35822-46-9	0.102 JB	5.39	0.0179	1
11031	OCDD	3268-87-9	1.07 JB	10.8	0.0214	1
11031	2378-TCDF	51207-31-9	0.0295 JQ	1.08	0.0182	1
11031	12378-PeCDF	57117-41-6	0.132 JBQ	5.39	0.0138	1
11031	23478-PeCDF	57117-31-4	0.104 JBQ	5.39	0.0131	1
11031	123478-HxCDF	70648-26-9	0.0906 JB	5.39	0.0101	1
11031	123678-HxCDF	57117-44-9	0.0740 JBQ	5.39	0.0102	1
11031	123789-HxCDF	72918-21-9	0.0523 JBQ	5.39	0.0126	1
11031	234678-HxCDF	60851-34-5	0.0743 JBQ	5.39	0.00973	1
11031	1234678-HpCDF	67562-39-4	0.0646 JBQ	5.39	0.00724	1
11031	1234789-HpCDF	55673-89-7	0.0317 JBQ	5.39	0.0101	1
11031	OCDF	39001-02-0	0.119 JB	10.8	0.0219	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0185			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 02:09	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13210B16A	07/31/2013 11:23	Laura M Krieger	26.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201321131875	07/30/2013 16:50	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201321131875	07/30/2013 16:51	Lisa J Cooke	n.a.
10592	19a PCBs and PCTs 8082A	SW-846 8082A	1	132140017A	08/05/2013 01:08	Monica M Souders	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	132140017A	08/03/2013 23:00	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 13:33	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 18:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 09:36	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-853-SA5A-SB-3.5-4.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143796
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:15 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85335 SDG#: PH077-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	132170637001	08/08/2013 23:56	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:28	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:28	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:28	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:28	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.74	J	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.5	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	6.1	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.6	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.0	J	1.7	0.67	1
12969	Pyrene	129-00-0	1.4	J	1.7	0.67	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.5	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		39.3	7.09	1
06944	Antimony	7440-36-0	3.93	U	3.93	0.727	1
06935	Arsenic	7440-38-2	2.52	J	3.93	0.688	1
06946	Barium	7440-39-3	112		0.983	0.0324	1
06947	Beryllium	7440-41-7	0.594	J	0.983	0.0658	1
07914	Boron	7440-42-8	1.73	J	9.83	0.825	1
06949	Cadmium	7440-43-9	0.210	J	0.983	0.0747	1
01650	Calcium	7440-70-2	2,240		19.7	3.28	1
06951	Chromium	7440-47-3	21.8		2.95	0.157	1
06952	Cobalt	7440-48-4	5.93		0.983	0.0973	1
06953	Copper	7440-50-8	16.3		1.97	0.285	1
01654	Iron	7439-89-6	20,600		39.3	3.56	1
06955	Lead	7439-92-1	8.79		2.95	0.491	1
01656	Lithium	7439-93-2	19.4		3.9	0.33	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,180		9.83	1.64	1
06958	Manganese	7439-96-5	334		0.983	0.0816	1
06960	Molybdenum	7439-98-7	0.689	J	1.97	0.167	1
06961	Nickel	7440-02-0	13.6		1.97	0.128	1
10145	Phosphorus	7723-14-0	348		9.83	2.84	1
01662	Potassium	7440-09-7	3,860		98.3	8.20	1
01667	Sodium	7440-23-5	70.6	J	98.3	16.4	1
06969	Tin	7440-31-5	2.38	J	9.83	0.216	1
06970	Titanium	7440-32-6	1,100		0.983	0.167	1
06971	Vanadium	7440-62-2	36.4		0.983	0.128	1
06972	Zinc	7440-66-6	59.0		3.93	0.197	1
10146	Zirconium	7440-67-7	4.91	U	4.91	0.825	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.174	J	0.393	0.0983	2
06142	Silver	7440-22-4	0.0426	J	0.197	0.0255	2
06144	Strontium	7440-24-6	22.3		0.393	0.0668	2
06145	Thallium	7440-28-0	0.265		0.197	0.0295	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.010	J	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.18		0.0100	0.0100	1
	The pH was measured in water at 21.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.110	JBQ	0.972	0.0197	1
11031	12378-PeCDD	40321-76-4	0.481	JQ	4.86	0.0255	1
11031	123478-HxCDD	39227-28-6	0.394	JB	4.86	0.0277	1
11031	123678-HxCDD	57653-85-7	1.08	JB	4.86	0.0305	1
11031	123789-HxCDD	19408-74-3	1.13	JB	4.86	0.0298	1
11031	1234678-HpCDD	35822-46-9	23.8	B	4.86	0.0379	1
11031	OCDD	3268-87-9	380	B	9.72	0.0307	1
11031	2378-TCDF	51207-31-9	0.242	JQ	0.972	0.0286	1
11031	12378-PeCDF	57117-41-6	0.678	JB	4.86	0.0188	1
11031	23478-PeCDF	57117-31-4	0.476	JB	4.86	0.0182	1
11031	123478-HxCDF	70648-26-9	0.369	JB	4.86	0.0225	1
11031	123678-HxCDF	57117-44-9	0.347	JB	4.86	0.0219	1
11031	123789-HxCDF	72918-21-9	0.359	JBQ	4.86	0.0304	1
11031	234678-HxCDF	60851-34-5	0.363	JB	4.86	0.0212	1
11031	1234678-HpCDF	67562-39-4	3.63	JB	4.86	0.0164	1
11031	1234789-HpCDF	55673-89-7	0.421	JBQ	4.86	0.0232	1
11031	OCDF	39001-02-0	13.5	B	9.72	0.0217	1
Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.924				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	70	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 04:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 16:18	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 19:43	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 09:59	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:19	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:42	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:42	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:42	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:42	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:39	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-851-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143797
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 08:40 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

85100 SDG#: PH077-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,200		40.3	7.26	1
06944	Antimony	7440-36-0	4.03	U	4.03	0.745	1
06935	Arsenic	7440-38-2	3.31	J	4.03	0.705	1
06946	Barium	7440-39-3	114		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.662	J	1.01	0.0674	1
07914	Boron	7440-42-8	1.48	J	10.1	0.846	1
06949	Cadmium	7440-43-9	0.175	J	1.01	0.0765	1
01650	Calcium	7440-70-2	1,940		20.1	3.36	1
06951	Chromium	7440-47-3	22.8		3.02	0.161	1
06952	Cobalt	7440-48-4	6.55		1.01	0.0996	1
06953	Copper	7440-50-8	16.7		2.01	0.292	1
01654	Iron	7439-89-6	22,000		40.3	3.64	1
06955	Lead	7439-92-1	7.14		3.02	0.503	1
01656	Lithium	7439-93-2	21.5		4.0	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,360		10.1	1.68	1
06958	Manganese	7439-96-5	355		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.532	J	2.01	0.171	1
06961	Nickel	7440-02-0	14.7		2.01	0.131	1
10145	Phosphorus	7723-14-0	387		10.1	2.91	1
01662	Potassium	7440-09-7	3,570		101	8.39	1
01667	Sodium	7440-23-5	69.5	J	101	16.8	1
06969	Tin	7440-31-5	2.66	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,100		1.01	0.171	1
06971	Vanadium	7440-62-2	38.2		1.01	0.131	1
06972	Zinc	7440-66-6	57.4		4.03	0.201	1
10146	Zirconium	7440-67-7	5.03	U	5.03	0.846	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.169	J	0.403	0.101	2
06142	Silver	7440-22-4	0.0316	J	0.201	0.0262	2
06144	Strontium	7440-24-6	21.7		0.403	0.0684	2
06145	Thallium	7440-28-0	0.294		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	U	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.29		0.0100	0.0100	1
	The pH was measured in water at 21.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0325 JBQ	1.01	0.0226	1
11031	12378-PeCDD	40321-76-4	0.0601 JQ	5.03	0.0377	1
11031	123478-HxCDD	39227-28-6	0.0427 JBQ	5.03	0.0332	1
11031	123678-HxCDD	57653-85-7	0.156 JBQ	5.03	0.0366	1
11031	123789-HxCDD	19408-74-3	0.243 JB	5.03	0.0299	1
11031	1234678-HpCDD	35822-46-9	0.383 JBQ	5.03	0.0381	1
11031	OCDD	3268-87-9	5.30 JB	10.1	0.0545	1
11031	2378-TCDF	51207-31-9	0.0333 JQ	1.01	0.0189	1
11031	12378-PeCDF	57117-41-6	0.0953 JBQ	5.03	0.0254	1
11031	23478-PeCDF	57117-31-4	0.0687 JBQ	5.03	0.0242	1
11031	123478-HxCDF	70648-26-9	0.0845 JBQ	5.03	0.0129	1
11031	123678-HxCDF	57117-44-9	5.03 U	5.03	0.0125	1
11031	123789-HxCDF	72918-21-9	0.252 JBQ	5.03	0.0116	1
11031	234678-HxCDF	60851-34-5	0.0653 JBQ	5.03	0.0116	1
11031	1234678-HpCDF	67562-39-4	0.138 JB	5.03	0.0199	1
11031	1234789-HpCDF	55673-89-7	0.0530 JB	5.03	0.0279	1
11031	OCDF	39001-02-0	0.306 JB	10.1	0.0565	1
Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0278			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	42	25 - 181
13C12-123478-HxCDD	40	32 - 141
13C12-123678-HxCDD	40	28 - 130
13C12-123789-HxCDD	45	28 - 130
13C12-1234678-HpCDD	36	23 - 140
13C12-OCDD	30	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	43	24 - 185
13C12-23478-PeCDF	42	21 - 178
13C12-123478-HxCDF	40	26 - 152
13C12-123678-HxCDF	43	26 - 123
13C12-234678-HxCDF	44	28 - 136
13C12-123789-HxCDF	51	29 - 147
13C12-1234678-HpCDF	41	28 - 143
13C12-1234789-HpCDF	35	26 - 138
13C12-OCDF	26	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13214SLC026	08/08/2013 04:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13214SLC026	08/03/2013 22:15	Nicholas W Shroyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132120018A	08/02/2013 15:37	Tracy A Cole	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	132120018A	08/01/2013 09:00	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13218001	08/08/2013 20:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13218001	08/06/2013 13:00	Daniel E Hess	1
01643	Aluminum	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	132170637001	08/09/2013 10:03	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	132170637001	08/09/2013 00:23	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	132170637001B	08/06/2013 20:44	David K Beck	2
06142	Silver	SW-846 6020A	1	132170637001A	08/06/2013 20:44	David K Beck	2
06144	Strontium	SW-846 6020A	1	132170637001A	08/06/2013 20:44	David K Beck	2
06145	Thallium	SW-846 6020A	1	132170637001A	08/06/2013 20:44	David K Beck	2
00159	3a Mercury 7471A	SW-846 7471B	1	132110638001	08/01/2013 04:45	Damary Valentin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-849-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7143798
LL Group # 1407677
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/29/2013 09:45 by TB

Submitted: 07/30/2013 09:25
Reported: 08/12/2013 09:44

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

84900 SDG#: PH077-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	132170637001	08/05/2013 23:16	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	132110638001	07/31/2013 12:40	Denise K Conners	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13211039402A	07/30/2013 19:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13211162401B	07/31/2013 00:42	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13214SLC026	Sample number(s): 7143795-7143798									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	108		69-114		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	102		71-113		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		75-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	106		76-115		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		76-117		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		77-129		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	102		70-130		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	109		64-120		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		71-120		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	123		65-131		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	128		67-140		
Chrysene	1.7	U	1.7	0.33	ug/kg	106		78-111		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	112		65-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	134*		68-125		
Dimethylphthalate	18	U	18.	6.0	ug/kg	114		70-130		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	120		67-143		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	109		68-119		
Fluorene	1.7	U	1.7	0.67	ug/kg	110		75-123		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	112		66-122		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		74-113		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	102		64-120		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	85		30-125		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	124		57-133		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	104		71-120		
Batch number: 13210B16A	Sample number(s): 7143796									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	77		67-119		
Batch number: 13213A20A	Sample number(s): 7143794									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	100	75-135	4	30
Batch number: 132140017A	Sample number(s): 7143795-7143796									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	76	79	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	95		80-120		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	97		72-120		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 132120018A	Sample number(s): 7143795-7143798									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	108		70-123		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	114		75-128		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	116		64-134		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	119		65-128		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	90		49-107		
Batch number: 132110638001	Sample number(s): 7143795-7143798									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	115		85-120		
Batch number: 132170637001	Sample number(s): 7143796-7143798									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	101		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	101		80-120		
Calcium	6.93	J	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	103		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	107		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	101		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	102		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	105		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	103		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	100		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	100		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	101		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 132170637001A	Sample number(s): 7143796-7143798									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	114		80-120		
Batch number: 132170637001B	Sample number(s): 7143796-7143798									
Selenium	0.400	U	0.400	0.100	mg/kg	104		80-120		
Batch number: 132180637001	Sample number(s): 7143795									
Aluminum	40.0	U	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	105		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	7.93	J	20.0	3.34	mg/kg	108		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	106		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	107		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	107		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	107		80-120		
Magnesium	1.98	J	10.0	1.67	mg/kg	105		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	106		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	109		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	108		80-120		
Potassium	100 U		100.	8.34	mg/kg	105		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.63	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	107		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	0.472	J	4.00	0.200	mg/kg	106		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	106		80-120		
Batch number: 132180637001A	Sample number(s): 7143795									
Silver	0.200	U	0.200	0.0260	mg/kg	106		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	105		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	110		80-120		
Batch number: 132180637001B	Sample number(s): 7143795									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 13211039402A	Sample number(s): 7143795-7143798									
15a pH by 9045D						100		95-105		
Batch number: 13211162401B	Sample number(s): 7143795-7143798									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13218001	Sample number(s): 7143795-7143798									
2378-TCDD	0.0240	J	1.00	0.0223	ng/kg	91		67-158		
12378-PeCDD	5.00	U	5.00	0.0227	ng/kg	96		70-142		
123478-HxCDD	0.0349	J	5.00	0.0148	ng/kg	99		70-164		
123678-HxCDD	0.0314	J	5.00	0.0166	ng/kg	98		76-134		
123789-HxCDD	0.0571	J	5.00	0.0161	ng/kg	97		64-162		
1234678-HpCDD	0.0597	J	5.00	0.0164	ng/kg	95		70-140		
OCDD	0.310	J	10.0	0.0170	ng/kg	96		78-144		
2378-TCDF	1.00	U	1.00	0.0188	ng/kg	95		75-158		
12378-PeCDF	0.0576	J	5.00	0.0141	ng/kg	98		80-134		
23478-PeCDF	0.0456	J	5.00	0.0132	ng/kg	95		68-160		
123478-HxCDF	0.0428	J	5.00	0.00810	ng/kg	102		72-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123678-HxCDF	0.00975 J	5.00	0.00770	ng/kg	97		84-130		
123789-HxCDF	0.0419 J	5.00	0.00940	ng/kg	99		78-130		
234678-HxCDF	0.0472 J	5.00	0.00760	ng/kg	97		70-156		
1234678-HpCDF	0.0459 J	5.00	0.00620	ng/kg	96		82-122		
1234789-HpCDF	0.0308 J	5.00	0.00880	ng/kg	98		78-138		
OCDF	0.129 J	10.0	0.0224	ng/kg	96		63-170		
TEQ WHO 2005 - EDLx0.0	0.0247			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13214SLC026	Sample number(s): 7143795-7143798 UNSPK: 7143796								
Acenaphthene	113	114	48-127	1	30				
Acenaphthylene	100	102	49-121	2	30				
Anthracene	101	99	52-126	2	30				
Benzo(a)anthracene	104	104	32-135	0	30				
Benzo(a)pyrene	102	103	36-138	1	30				
Benzo(b)fluoranthene	108	108	26-142	0	30				
Benzo(e)pyrene	96	96	70-130	1	30				
Benzo(g,h,i)perylene	105	105	33-141	0	30				
Benzo(k)fluoranthene	106	105	47-129	1	30				
Butylbenzylphthalate	125	127	59-153	2	30				
Di-n-butylphthalate	131	129	62-154	1	30				
Chrysene	103	104	29-148	1	30				
Dibenz(a,h)anthracene	110	110	34-125	1	30				
Diethylphthalate	133*	134*	76-127	0	30				
Dimethylphthalate	110	110	62-136	0	30				
Bis(2-Ethylhexyl)phthalate	125	124	39-167	0	30				
Fluoranthene	107	104	47-135	3	30				
Fluorene	101	104	50-129	3	30				
Indeno(1,2,3-cd)pyrene	109	110	17-136	1	30				
1-Methylnaphthalene	108	107	50-131	1	30				
2-Methylnaphthalene	106	104	28-144	2	30				
Naphthalene	102	102	31-148	0	30				
N-Nitrosodimethylamine	83	84	48-113	2	30				
Di-n-octylphthalate	121	124	52-162	2	30				
Phenanthrene	102	99	29-142	3	30				
Pyrene	102	101	26-143	1	30				
Batch number: 13210B16A	Sample number(s): 7143796 UNSPK: P141113								
11a TPH by EPA 8015B GRO	75	75	39-118	15	30				
Batch number: 132140017A	Sample number(s): 7143795-7143796 UNSPK: 7143795								
PCB-1016	86	88	16-146	3	50				
PCB-1260	88	91	40-134	4	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132120018A	Sample number(s): 7143795-7143798 UNSPK: P138011								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	114	726*	49-123	146*	20				
EFH (C21-C30)	115	263*	49-123	78*	20				
EFH (C30-C40)	101	108	49-123	7	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 132110638001	Sample number(s): 7143795-7143798 UNSPK: 7143795 BKG: 7143795								
3a Mercury 7471A	126	121	65-135	3	20	0.0155 U	0.0165 U	0 (1)	20
Batch number: 132170637001	Sample number(s): 7143796-7143798 UNSPK: 7143796 BKG: 7143796								
Aluminum	1505 (2)	2798 (2)	75-125	12	20	17,300	16,100	7	20
Antimony	54*	53*	75-125	3	20	3.85 U	3.85 U	0 (1)	20
Arsenic	95	94	75-125	1	20	4.58	4.24	8 (1)	20
Barium	96	102	75-125	4	20	84.5	84.3	0	20
Beryllium	102	104	75-125	2	20	0.696 J	0.661 J	5 (1)	20
Boron	100	100	75-125	0	20	9.62 U	9.62 U	0 (1)	20
Cadmium	98	96	75-125	2	20	0.962 U	0.962 U	0 (1)	20
Calcium	91 (2)	159 (2)	75-125	10	20	2,170	2,070	5	20
Chromium	98	110	75-125	6	20	21.9	21.2	4	20
Cobalt	94	97	75-125	3	20	5.71	8.36	38*	20
Copper	101	111	75-125	6	20	13.7	12.8	7	20
Iron	-2073 (2)	871 (2)	75-125	13	20	22,200	20,500	8	20
Lead	93	104	75-125	8	20	5.87	6.14	5 (1)	20
Lithium	99	103	75-125	3	20	28.0	26.1	7	20
Magnesium	-105 (2)	189 (2)	75-125	12	20	4,580	4,280	7	20
Manganese	10 (2)	173 (2)	75-125	21*	20	324	413	24*	20
Molybdenum	96	96	75-125	0	20	0.867 J	0.418 J	70* (1)	20
Nickel	97	100	75-125	2	20	12.7	12.9	2	20
Phosphorus	73*	103	75-125	9	20	247	219	12	20
Potassium	84	117	75-125	10	20	2,250	1,970	13	20
Sodium	97	99	75-125	2	20	129	122	6 (1)	20
Tin	89	89	75-125	1	20	2.66 J	2.63 J	1 (1)	20
Titanium	133 (2)	268 (2)	75-125	10	20	1,080	949	13	20
Vanadium	102	112	75-125	5	20	39.4	36.3	8	20
Zinc	89	100	75-125	6	20	48.7	44.6	9	20
Zirconium	99	100	75-125	1	20	4.81 U	1.37 J	200* (1)	20
Batch number: 132170637001A	Sample number(s): 7143796-7143798 UNSPK: 7143796 BKG: 7143796								
Silver	101	102	75-125	2	20	0.0417 J	0.0396 J	5 (1)	20
Strontium	92	97	75-125	1	20	17.8	16.5	8	20
Thallium	95	96	75-125	0	20	0.253	0.263	4 (1)	20
Batch number: 132170637001B	Sample number(s): 7143796-7143798 UNSPK: 7143796 BKG: 7143796								
Selenium	106	99	75-125	6	20	0.128 J	0.131 J	2 (1)	20
Batch number: 132180637001	Sample number(s): 7143795 UNSPK: P150955 BKG: P150955								
Aluminum	-295	488 (2)	75-125	6	20	23,900	24,000	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Antimony	37*	31*	75-125	13	20	3.92 U	3.96 U	0 (1)	20
Arsenic	98	96	75-125	1	20	4.75	4.74	0 (1)	20
Barium	102	99	75-125	0	20	102	102	1	20
Beryllium	105	103	75-125	1	20	0.784 J	0.798 J	2 (1)	20
Boron	99	96	75-125	1	20	11.5	10.8	7 (1)	20
Cadmium	99	95	75-125	1	20	0.306 J	0.316 J	3 (1)	20
Calcium	1807 (2)	-1119 (2)	75-125	79*	20	13,200	10,400	24*	20
Chromium	64*	79	75-125	7	20	32.5	29.7	9	20
Cobalt	95	94	75-125	2	20	7.55	7.08	6	20
Copper	100	97	75-125	0	20	14.6	13.8	6	20
Iron	-4442 (2)	-2894 (2)	75-125	6	20	26,300	27,500	5	20
Lead	92	88	75-125	0	20	7.81	8.57	9 (1)	20
Lithium	103	101	75-125	0	20	25.0	24.7	1	20
Magnesium	-218 (2)	-91 (2)	75-125	4	20	5,870	5,860	0	20
Manganese	-4 (2)	48 (2)	75-125	7	20	366	386	5	20
Molybdenum	99	94	75-125	2	20	0.312 J	0.182 J	52* (1)	20
Nickel	93	92	75-125	1	20	17.8	16.2	9	20
Phosphorus	142*	98	75-125	10	20	278	295	6	20
Potassium	115	99	75-125	3	20	3,680	3,590	2	20
Sodium	108	101	75-125	3	20	83.1 J	90.8 J	9 (1)	20
Tin	91	88	75-125	0	20	2.67 J	2.80 J	5 (1)	20
Titanium	348 (2)	268 (2)	75-125	5	20	1,040	1,120	7	20
Vanadium	100	102	75-125	2	20	55.1	55.6	1	20
Zinc	92	87	75-125	1	20	65.0	80.6	22*	20
Zirconium	104	101	75-125	0	20	6.04	7.46	21* (1)	20
Batch number: 132180637001A	Sample number(s): 7143795 UNSPK: P150955 BKG: P150955								
Silver	108	114	75-125	9	20	0.0453 J	0.0546 J	19 (1)	20
Strontium	99 (2)	122 (2)	75-125	4	20	40.8	36.4	11	20
Thallium	98	100	75-125	3	20	0.323	0.347	7 (1)	20
Batch number: 132180637001B	Sample number(s): 7143795 UNSPK: P150955 BKG: P150955								
Selenium	97	104	75-125	9	20	0.132 J	0.133 J	1 (1)	20
Batch number: 13211039402A	Sample number(s): 7143795-7143798 BKG: 7143795								
15a pH by 9045D						6.43	6.40	0	3
Batch number: 13211162401B	Sample number(s): 7143795-7143798 BKG: P143814								
14a Moisture Content by 160.3						13.8	13.2	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13214SLC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7143795	91	91	110
7143796	92	97	108
7143797	88	89	105
7143798	87	88	103
Blank	94	97	109
LCS	94	101	111
MS	94	97	107
MSD	92	98	109
Limits:	54-129	61-134	55-129

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13210B16A

	Trifluorotoluene-F
7143796	75
Blank	78
LCS	78
MS	69
MSD	68
Limits:	61-122

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13213A20A

	Trifluorotoluene-F
7143794	86
Blank	88
LCS	117
LCSD	118
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 132140017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7143795	97	93
7143796	102	102
Blank	100	101
LCS	101	106
LCSD	121*	119
MS	92	88
MSD	93	92
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 132120018A

	Chlorobenzene	Orthoterphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1407677
Reported: 08/12/13 at 09:44 AM

Surrogate Quality Control

7143795	100	104
7143796	104	108
7143797	92	96
7143798	98	101
Blank	104	105
LCS	108	110
MS	108	101
MSD	102	104
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13218001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7143795	67	67	73	75	71	74
7143796	67	73	77	81	77	77
7143797	73	76	80	84	80	72
7143798	56	42	40	43	44	51
Blank	74	75	83	87	83	85
OPR	53	29	25	26	34	51
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7143795	85	68	66	67	70	73
7143796	86	74	71	74	74	78
7143797	91	77	70	77	78	79
7143798	41	35	26	42	40	40
Blank	94	79	80	76	82	84
OPR	29	29	30	29	26	26
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7143795	68	71	71	59	66
7143796	75	74	75	61	71
7143797	77	75	76	68	78
7143798	45	36	30	48	43
Blank	82	82	84	67	75
OPR	37	30	37	42	33
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1407677 7143794-98

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/29/2013
CarrierName: FedEx
AirbillNo: 796342615190

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130729-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB2-072913	7/29/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-853-SA5A-SB-0.0-0.5	7/29/13 08:00	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X										X											
SL-853-SA5A-SB-0.0-0.5	7/29/13 08:00	SO	None	1 - 4 oz glass	10 day													X																		
SL-853-SA5A-SB-3.5-4.5	7/29/13 08:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X							X											
SL-853-SA5A-SB-3.5-4.5	7/29/13 08:15	SO	None	2 - Encore	10 day																			X												
SL-851-SA5A-SB-0.0-0.5	7/29/13 08:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-851-SA5A-SB-0.0-0.5	7/29/13 08:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-849-SA5A-SB-0.0-0.5	7/29/13 09:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X											X											
SL-849-SA5A-SB-0.0-0.5	7/29/13 09:45	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler: J Bennett

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Stephen Myers	07/29/2013	1600									
									Pat Gh	7/30/13	0925

COC Rev 2

COC 20130729-01, Page 1 of 1

1 of 1

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Environmental Sample Administration Receipt Documentation Log

1407677

Client/Project: CDM Smith

Date of Receipt: 7/30/13

Time of Receipt: 0925

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.3	TB	WI	Y	B	
2	↓	0.8	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat Sh 3472 **Date/Time:** 7/30/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

August 12, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 07/31/2013
Group Number: 1408035
SDG: PH079
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-073013 Water	7145265

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Attn: Natalie Luciano

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	1.0	U	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.40	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1
12971	Naphthalene	91-20-3	0.052	U	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
10591	Aroclor 5432	63496-31-1	0.41	U	0.41	0.081	1
10591	Aroclor 5442	12642-23-8	0.41	U	0.41	0.081	1
10591	Aroclor 5460	11126-42-4	0.41	U	0.41	0.089	1
10591	PCB-1016	12674-11-2	0.41	U	0.41	0.081	1
10591	PCB-1221	11104-28-2	0.41	U	0.41	0.081	1
10591	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
10591	PCB-1242	53469-21-9	0.41	U	0.41	0.081	1
10591	PCB-1248	12672-29-6	0.41	U	0.41	0.081	1
10591	PCB-1254	11097-69-1	0.41	U	0.41	0.081	1
10591	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
10591	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
10591	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/l		mg/l	mg/l	
10365	EFH (C12-C14)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C15-C20)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C21-C30)	n.a.	0.098	U	0.098	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.098	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C8-C11)	n.a.	0.098 U	0.098	0.049	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00042 J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0034 J	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0027 J	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.8	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.409	JQ	1.97	0.232	1
10915	12378-PeCDD	40321-76-4	0.902	JBQ	9.86	0.265	1
10915	123478-HxCDD	39227-28-6	0.838	JBQ	9.86	0.170	1
10915	123678-HxCDD	57653-85-7	0.597	JB	9.86	0.193	1
10915	123789-HxCDD	19408-74-3	0.806	JBQ	9.86	0.183	1
10915	1234678-HpCDD	35822-46-9	0.559	JBQ	9.86	0.211	1
10915	OCDD	3268-87-9	2.05	JB	19.7	0.205	1
10915	2378-TCDF	51207-31-9	1.97	U	1.97	0.200	1
10915	12378-PeCDF	57117-41-6	0.863	JBQ	9.86	0.136	1
10915	23478-PeCDF	57117-31-4	0.824	JBQ	9.86	0.119	1
10915	123478-HxCDF	70648-26-9	0.852	JB	9.86	0.0953	1
10915	123678-HxCDF	57117-44-9	0.666	JB	9.86	0.101	1
10915	123789-HxCDF	72918-21-9	0.811	JBQ	9.86	0.106	1
10915	234678-HxCDF	60851-34-5	0.657	JBQ	9.86	0.0934	1
10915	1234678-HpCDF	67562-39-4	0.831	JBQ	9.86	0.0774	1
10915	1234789-HpCDF	55673-89-7	0.696	JBQ	9.86	0.101	1
10915	OCDF	39001-02-0	2.10	JBQ	19.7	0.207	1
Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.212				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13215WAD026	08/05/2013 02:49	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13215WAD026	08/04/2013 10:45	David S Schrum	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13213A20A	08/01/2013 20:38	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13213A20A	08/01/2013 20:38	Catherine J Schwarz	1
10591	21b PCBs and PCTs 8082A	SW-846 8082A	1	132120025A	08/02/2013 02:41	Jessica L Miller	1
11121	PCB Waters Update IV Ext	SW-846 3510C	1	132120025A	08/01/2013 09:00	William H Saadeh	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	132170012A	08/07/2013 06:04	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	132170012A	08/05/2013 22:50	Karen L Beyer	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13212005	08/05/2013 20:56	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13212005	08/01/2013 13:00	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07044	Antimony	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07035	Arsenic	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07046	Barium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07047	Beryllium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
08014	Boron	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07049	Cadmium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01750	Calcium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07051	Chromium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07052	Cobalt	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07053	Copper	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01754	Iron	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07055	Lead	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01756	Lithium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01757	Magnesium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07058	Manganese	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07060	Molybdenum	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07061	Nickel	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
10143	Phosphorus	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01762	Potassium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
01767	Sodium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07069	Tin	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07070	Titanium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07071	Vanadium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
07072	Zinc	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1
10144	Zirconium	SW-846 6010C	1	132190635001	08/10/2013 20:28	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-073013 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7145265
LL Group # 1408035
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 07/30/2013 15:00 by PH

Submitted: 07/31/2013 09:10
Reported: 08/12/2013 11:36

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

730EB SDG#: PH079-01EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06041	Selenium	SW-846 6020A	1	132190639001B	08/08/2013 18:53	David K Beck	1
06042	Silver	SW-846 6020A	1	132190639001A	08/08/2013 18:53	David K Beck	1
06044	Strontium	SW-846 6020A	1	132190639001A	08/08/2013 18:53	David K Beck	1
06045	Thallium	SW-846 6020A	1	132190639001A	08/08/2013 18:53	David K Beck	1
00259	3b Mercury 7470A	SW-846 7470A	1	132145713001	08/04/2013 11:54	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	132190635001	08/08/2013 11:00	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	132190639001	08/08/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132145713001	08/03/2013 09:25	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13212012202A	07/31/2013 23:05	Clayton C Litchmore	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408035
Reported: 08/12/13 at 11:36 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13215WAD026	Sample number(s): 7145265									
Acenaphthene	0.050	U	0.050	0.010	ug/l	103	102	65-124	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	111	109	72-113	2	30
Anthracene	0.050	U	0.050	0.010	ug/l	111	110	70-117	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	96	95	75-115	1	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	99	99	72-120	0	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	94	94	74-130	0	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	88	89	70-130	1	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	96	97	63-121	1	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	109	110	74-118	1	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	161*	159*	40-138	1	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	100	100	70-145	1	30
Chrysene	0.050	U	0.050	0.010	ug/l	98	97	75-112	1	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	94	94	66-122	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	102	100	74-129	2	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	87	85	40-119	2	30
Bis(2-Ethylhexyl)phthalate	1.0	U	1.0	0.050	ug/l	170*	168*	70-143	1	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	111	112	73-116	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	101	99	74-115	2	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	89	89	66-122	0	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	114	110	71-120	3	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	110	109	74-119	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	100	99	67-118	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	75	75	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	159*	156*	57-145	2	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	98	100	72-109	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	93	92	71-116	1	30
Batch number: 13213A20A	Sample number(s): 7145265									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	105	100	75-135	4	30
Batch number: 132120025A	Sample number(s): 7145265									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	64	62	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	81	91	69-120	12	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	83	91	69-128	9	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408035
Reported: 08/12/13 at 11:36 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132170012A	Sample number(s): 7145265								
EFH (C12-C14)	0.10 U	0.10	0.050	mg/l	100	104	70-130	3	30
EFH (C15-C20)	0.10 U	0.10	0.050	mg/l	114	117	70-130	2	30
EFH (C21-C30)	0.10 U	0.10	0.050	mg/l	117	119	70-130	2	30
EFH (C30 - C40)	0.50 U	0.50	0.10	mg/l	111	93	70-130	18	30
EFH (C8-C11)	0.10 U	0.10	0.050	mg/l	88	86	70-130	3	30
Batch number: 132145713001	Sample number(s): 7145265								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	101	98	90-115	3	20
Batch number: 132190635001	Sample number(s): 7145265								
Aluminum	0.400 U	0.400	0.0828	mg/l	98	100	90-112	2	20
Antimony	0.0400 U	0.0400	0.0053	mg/l	99	99	88-111	0	20
Arsenic	0.0400 U	0.0400	0.0068	mg/l	99	101	90-113	2	20
Barium	0.0100 U	0.0100	0.00033	mg/l	101	104	90-110	3	20
Beryllium	0.0100 U	0.0100	0.00067	mg/l	99	102	88-110	2	20
Boron	0.100 U	0.100	0.0084	mg/l	92	95	89-110	3	20
Cadmium	0.0100 U	0.0100	0.00076	mg/l	102	102	90-112	0	20
Calcium	0.400 U	0.400	0.0334	mg/l	100	102	90-110	2	20
Chromium	0.0300 U	0.0300	0.0016	mg/l	99	101	90-110	2	20
Cobalt	0.0100 U	0.0100	0.0013	mg/l	103	104	90-110	1	20
Copper	0.0200 U	0.0200	0.0027	mg/l	103	106	90-112	3	20
Iron	0.400 U	0.400	0.0430	mg/l	99	101	90-112	2	20
Lead	0.0300 U	0.0300	0.0047	mg/l	106	105	88-110	1	20
Lithium	0.0400 U	0.0400	0.0047	mg/l	100	103	90-110	3	20
Magnesium	0.200 U	0.200	0.0167	mg/l	99	101	90-110	3	20
Manganese	0.0100 U	0.0100	0.00083	mg/l	102	105	90-110	3	20
Molybdenum	0.0200 U	0.0200	0.0017	mg/l	102	103	90-110	1	20
Nickel	0.0200 U	0.0200	0.0015	mg/l	105	106	90-111	1	20
Phosphorus	0.200 U	0.200	0.0418	mg/l	101	102	90-110	1	20
Potassium	1.00 U	1.00	0.0980	mg/l	99	102	85-115	3	20
Sodium	2.00 U	2.00	0.167	mg/l	98	101	87-114	3	20
Tin	0.0400 U	0.0400	0.0029	mg/l	99	99	90-110	0	20
Titanium	0.0200 U	0.0200	0.0017	mg/l	101	103	90-113	2	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	96	98	90-110	3	20
Zinc	0.0400 U	0.0400	0.0020	mg/l	101	102	90-110	1	20
Zirconium	0.100 U	0.100	0.0084	mg/l	100	104	90-110	3	20
Batch number: 132190639001A	Sample number(s): 7145265								
Silver	0.0010 U	0.0010	0.00011	mg/l	103	101	90-115	2	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	100	98	80-120	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	102	105	80-120	3	20
Batch number: 132190639001B	Sample number(s): 7145265								
Selenium	0.0040 U	0.0040	0.00050	mg/l	98	106	80-120	8	20
Batch number: 13212012202A	Sample number(s): 7145265								
28b pH (9040B and 9040C)					99		99-103		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13212005	Sample number(s): 7145265								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408035
Reported: 08/12/13 at 11:36 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
2378-TCDD	2.00	U	2.00	0.253	pg/l	95		60-150		
12378-PeCDD	1.39	J	10.0	0.272	pg/l	98		60-150		
123478-HxCDD	0.780	J	10.0	0.156	pg/l	95		60-150		
123678-HxCDD	0.681	J	10.0	0.168	pg/l	93		60-150		
123789-HxCDD	0.679	J	10.0	0.168	pg/l	93		60-150		
1234678-HpCDD	1.39	J	10.0	0.173	pg/l	87		60-150		
OCDD	1.99	J	20.0	0.179	pg/l	91		60-150		
2378-TCDF	2.00	U	2.00	0.172	pg/l	89		60-150		
12378-PeCDF	0.757	J	10.0	0.133	pg/l	95		60-150		
23478-PeCDF	1.08	J	10.0	0.119	pg/l	96		60-150		
123478-HxCDF	0.898	J	10.0	0.0946	pg/l	91		60-150		
123678-HxCDF	0.859	J	10.0	0.0993	pg/l	91		60-150		
123789-HxCDF	0.974	J	10.0	0.105	pg/l	88		60-150		
234678-HxCDF	0.602	J	10.0	0.0920	pg/l	89		60-150		
1234678-HpCDF	0.610	J	10.0	0.0683	pg/l	92		60-150		
1234789-HpCDF	0.809	J	10.0	0.0814	pg/l	86		60-150		
OCDF	1.69	J	20.0	0.177	pg/l	82		60-150		
TEQ WHO 2005 - EDLx0.0	0.104				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13212012202A	Sample number(s): 7145265			BKG: P143887					
28b pH (9040B and 9040C)						8.3	8.3	1	3

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13215WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7145265	100	100	111
Blank	95	95	104
LCS	103	104	113
LCSD	104	104	110
Limits:	64-120	62-141	58-134

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408035
Reported: 08/12/13 at 11:36 AM

Surrogate Quality Control

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13213A20A

	Trifluorotoluene-F
7145265	89
Blank	88
LCS	117
LCSD	118
Limits:	63-135

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 132120025A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7145265	101	94
Blank	101	92
LCS	90	70
LCSD	100	54
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 132170012A

	Chlorobenzene	Orthoterphenyl
7145265	113	101
Blank	115	117
LCS	116	118
LCSD	117	119
Limits:	45-126	69-119

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13212005

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7145265	57	72	63	64	67	74
Blank	57	77	66	68	70	76
OPR	56	77	65	62	66	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7145265	64	64	60	74	73	75
Blank	71	75	72	75	75	76
OPR	66	70	69	77	68	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7145265	75	72	67	59	69
Blank	74	80	77	62	73
OPR	71	78	76	65	72

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1408035
Reported: 08/12/13 at 11:36 AM

Surrogate Quality Control

Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1408035 7145265

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 7/30/2013
CarrierName: FedEx
AirbillNo: 796353135781

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20130730-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	1,4 Dioxane 8260 SIM	VOCs 8260	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-073013	7/30/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-073013	7/30/13 15:00	WQ	None	2 - 250 mL Amber	10 day							X			X		X																			
EB-073013	7/30/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB-073013	7/30/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB-073013	7/30/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB-073013	7/30/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												

Special Instructions:

Sampler: Pa Hart

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Jay Myers	07/30/2013	1600									
										7/31/13	0910

COC Rev 2

COC 20130730-01, Page 1 of 1

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Environmental Sample Administration Receipt Documentation Log

1408035

Client/Project: CDM Smith

Date of Receipt: 7/31/13

Time of Receipt: 0910

Source Code: SO

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	1396	5.3	ST	WI	Y	B	
2	DT121	3.2	TB	WI	Y	B	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3472 **Date/Time:** 7/31/13 1010

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 09, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/12/2013
Group Number: 1433229
SDG: PH125
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-630A-SA5A-SB-0.0-0.5 Soil	7273419
SL-630C-SA5A-SB-0.0-0.5 Soil	7273420
SL-630B-SA5A-SB-0.0-0.5 Soil	7273421
SL-630D-SA5A-SB-0.0-0.5 Soil	7273422
SL-634-SA5A-SB-0.0-0.5 Soil	7273423

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-630A-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273419
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 13:30

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S630A SDG#: PH125-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	28	J	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	0.72		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 13:39	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	2	133260005A	11/22/2013 18:50	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-630C-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273420
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:05

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S630C SDG#: PH125-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	0.73		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 13:57	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	2	133260005A	11/22/2013 18:50	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-630B-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273421
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 13:45

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S630B SDG#: PH125-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	0.73		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 14:16	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	2	133260005A	11/22/2013 18:50	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-630D-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273422
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:27

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S630D SDG#: PH125-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	
11624	14a Moisture Content by 160.3	n.a.	1.1		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 14:34	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	2	133260005A	11/22/2013 18:50	Sally L Appleyard	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.67	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.67	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.67	1
12969	Benzo(b)fluoranthene	205-99-2	1.6	J	1.7	0.67	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.67	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.67	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.0	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.0	1
12969	Chrysene	218-01-9	1.2	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.67	1
12969	Diethylphthalate	84-66-2	18	U	18	6.0	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.0	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.0	1
12969	Fluoranthene	206-44-0	1.4	J	1.7	0.67	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.67	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.67	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.67	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.67	1
12969	Morpholine	110-91-8	20	U	20	20	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.67	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.67	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.0	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.67	1
12969	Pyrene	129-00-0	1.1	J	1.7	0.67	1
Aldehydes & Ketones	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	
13031	Formaldehyde	50-00-0	2,000	U	2,000	1,200	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	5.0	U	5.0	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C30-C40)	n.a.	10	U	10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,900		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.745	1
06935	Arsenic	7440-38-2	2.59	J	4.02	0.704	1
06946	Barium	7440-39-3	75.3		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.326	J	1.01	0.0674	1
07914	Boron	7440-42-8	3.86	J	10.1	0.845	1
06949	Cadmium	7440-43-9	0.304	J	1.01	0.0765	1
01650	Calcium	7440-70-2	2,670		20.1	3.36	1
06951	Chromium	7440-47-3	13.6		3.02	0.161	1
06952	Cobalt	7440-48-4	3.43		1.01	0.0996	1
06953	Copper	7440-50-8	6.27		2.01	0.292	1
01654	Iron	7439-89-6	18,400		40.2	3.64	1
06955	Lead	7439-92-1	5.06		3.02	0.503	1
01656	Lithium	7439-93-2	24.7		4.0	0.34	1
01657	Magnesium	7439-95-4	3,700		10.1	1.68	1
06958	Manganese	7439-96-5	275		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.204	J	2.01	0.171	1
06961	Nickel	7440-02-0	6.47		2.01	0.131	1
10145	Phosphorus	7723-14-0	351		10.1	2.91	1
01662	Potassium	7440-09-7	3,070		101	8.39	1
01667	Sodium	7440-23-5	121		101	16.8	1
06969	Tin	7440-31-5	2.99	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,130		1.01	0.171	1
06971	Vanadium	7440-62-2	25.8		1.01	0.131	1
06972	Zinc	7440-66-6	62.5		4.02	0.201	1
10146	Zirconium	7440-67-7	2.12	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.402	U	0.402	0.101	2
06142	Silver	7440-22-4	0.201	U	0.201	0.0262	2
06144	Strontium	7440-24-6	13.5		0.402	0.0684	2
06145	Thallium	7440-28-0	0.246		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.28	J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34		0.0100	0.0100	1
	The pH was measured in water at 18.2 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	0.61	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.116	JBQ	0.977	0.0905	1
11031	12378-PeCDD	40321-76-4	0.140	JBQ	4.88	0.0644	1
11031	123478-HxCDD	39227-28-6	0.133	JB	4.88	0.0475	1
11031	123678-HxCDD	57653-85-7	0.457	JB	4.88	0.0499	1
11031	123789-HxCDD	19408-74-3	0.291	JBQ	4.88	0.0454	1
11031	1234678-HpCDD	35822-46-9	10.3	B	4.88	0.0536	1
11031	OCDD	3268-87-9	118	B	9.77	0.0331	1
11031	2378-TCDF	51207-31-9	0.977	U	0.977	0.0684	1
11031	12378-PeCDF	57117-41-6	0.263	JB	4.88	0.0408	1
11031	23478-PeCDF	57117-31-4	0.116	JBQ	4.88	0.0378	1
11031	123478-HxCDF	70648-26-9	0.150	JBQ	4.88	0.0391	1
11031	123678-HxCDF	57117-44-9	0.149	JBQ	4.88	0.0336	1
11031	123789-HxCDF	72918-21-9	0.114	JBQ	4.88	0.0383	1
11031	234678-HxCDF	60851-34-5	0.130	JBQ	4.88	0.0327	1
11031	1234678-HpCDF	67562-39-4	1.89	JB	4.88	0.0177	1
11031	1234789-HpCDF	55673-89-7	0.210	JB	4.88	0.0247	1
11031	OCDF	39001-02-0	6.17	JB	9.77	0.0404	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.228				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	105	23 - 140
13C12-OCDD	118	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	94	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13322SLA026	11/25/2013 07:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:04	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133260005A	11/24/2013 14:53	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	2	133260005A	11/22/2013 18:50	Sally L Appleyard	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 19:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13322003	11/21/2013 17:53	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13322003	11/18/2013 10:30	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:34	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:32	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-634-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7273423
LL Group # 1433229
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/11/2013 14:50

Submitted: 11/12/2013 09:20
Reported: 12/09/2013 11:17

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

SL634 SDG#: PH125-05*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:49	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:49	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:49	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:49	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:32	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 16:47	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039401A	11/13/2013 13:00	Carolyn M Mastropietro	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322SLA026	Sample number(s): 7273423									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	94		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	87		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	95		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	94		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	85		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	93		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	85		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	91		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	91		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	90		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	81		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Morpholine	20	U	20.	20	ug/kg					
Naphthalene	1.7	U	1.7	0.67	ug/kg	108		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	89		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	81		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	93		79-112		
Batch number: 133220001A	Sample number(s): 7273423									
Formaldehyde	2,000 U		2,000.	1,200	ug/kg	104		69-141		
Batch number: 133260005A	Sample number(s): 7273419-7273423									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	70	86	62-87	20	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	93		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	117		84-125		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133220013A	Sample number(s): 7273423									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	97		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	100		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	73		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	81		60-115		
Batch number: 133240637001	Sample number(s): 7273423									
Aluminum	40.0	U	40.0	7.21	mg/kg	113		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	109		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	106		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	108		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	109		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	109		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	112		80-120		
Iron	4.05	J	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	110		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	108		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	107		80-120		
Manganese	1.54		1.00	0.0830	mg/kg	109		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	111		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	110		80-120		
Potassium	100 U		100.	8.34	mg/kg	106		80-120		
Sodium	100 U		100.	16.7	mg/kg	105		80-120		
Tin	1.63	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	109		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	106		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	108		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 133240637001A	Sample number(s): 7273423									
Silver	0.200	U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	111		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	109		80-120		
Batch number: 133240637001B	Sample number(s): 7273423									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		
Batch number: 133240638002	Sample number(s): 7273423									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	102		85-120		
Batch number: 13322243201A	Sample number(s): 7273423									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	84		80-120		
Batch number: 13317039401A	Sample number(s): 7273423									
15a pH by 9045D						100		95-105		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13323162401A	Sample number(s): 7273419-7273423								
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13322003	Sample number(s): 7273423								
2378-TCDD	0.0742 J	1.00	0.0629	ng/kg	103		67-158		
12378-PeCDD	0.105 J	5.00	0.0485	ng/kg	108		70-142		
123478-HxCDD	0.104 J	5.00	0.0214	ng/kg	104		70-164		
123678-HxCDD	0.0702 J	5.00	0.0226	ng/kg	105		76-134		
123789-HxCDD	0.0487 J	5.00	0.0216	ng/kg	103		64-162		
1234678-HpCDD	0.138 J	5.00	0.0202	ng/kg	103		70-140		
OCDD	0.299 J	10.0	0.0273	ng/kg	100		78-144		
2378-TCDF	1.00 U	1.00	0.0486	ng/kg	102		75-158		
12378-PeCDF	0.128 J	5.00	0.0281	ng/kg	101		80-134		
23478-PeCDF	0.130 J	5.00	0.0257	ng/kg	101		68-160		
123478-HxCDF	0.0643 J	5.00	0.0254	ng/kg	103		72-134		
123678-HxCDF	0.0684 J	5.00	0.0234	ng/kg	105		84-130		
123789-HxCDF	0.117 J	5.00	0.0250	ng/kg	106		78-130		
234678-HxCDF	0.0747 J	5.00	0.0232	ng/kg	105		70-156		
1234678-HpCDF	0.0882 J	5.00	0.0112	ng/kg	104		82-122		
1234789-HpCDF	0.107 J	5.00	0.0152	ng/kg	105		78-138		
OCDF	0.270 J	10.0	0.0328	ng/kg	105		63-170		
TEQ WHO 2005 - EDLx0.0	0.0577			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13322SLA026	Sample number(s): 7273423 UNSPK: P275655								
Acenaphthene	90	100	48-127	10	30				
Acenaphthylene	81	92	49-121	12	30				
Anthracene	86	101	52-126	16	30				
Benzo(a)anthracene	80	1001*	44-143	168*	30				
Benzo(a)pyrene	75	658*	44-140	155*	30				
Benzo(b)fluoranthene	66	1440*	26-142	177*	30				
Benzo(e)pyrene	68*	592*	70-130	154*	30				
Benzo(g,h,i)perylene	79	246*	33-141	97*	30				
Benzo(k)fluoranthene	77	569*	54-142	149*	30				
Butylbenzylphthalate	81	83	49-151	3	30				
Di-n-butylphthalate	92	96	52-147	4	30				
Chrysene	72	1248*	29-148	174*	30				
Dibenz(a,h)anthracene	90	161*	20-137	56*	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Diethylphthalate	95	95	43-145	0	30				
Dimethylphthalate	83	92	58-129	10	30				
Bis(2-Ethylhexyl)phthalate	94	262*	39-167	94*	30				
Fluoranthene	70	726*	40-148	156*	30				
Fluorene	93	99	51-137	7	30				
Indeno(1,2,3-cd)pyrene	83	289*	17-136	106*	30				
1-Methylnaphthalene	93	102	50-131	9	30				
2-Methylnaphthalene	92	100	35-152	8	30				
Naphthalene	101	106	31-148	5	30				
N-Nitrosodimethylamine	81	87	48-113	8	30				
Di-n-octylphthalate	78	91	52-162	15	30				
Phenanthrene	78	100	29-142	22	30				
Pyrene	65	661*	26-143	157*	30				
Batch number: 133220001A	Sample number(s): 7273423 UNSPK: P279108								
Formaldehyde	78	91	66-134	6	50				
Batch number: 133260005A	Sample number(s): 7273419-7273423 UNSPK: P280198								
PCB-1016	91	94	41-135	3	50				
PCB-1260	115	117	40-134	2	50				
Batch number: 133220013A	Sample number(s): 7273423 UNSPK: P275655								
EFH (C12-C14)	92	98	49-123	6	20				
EFH (C15-C20)	99	153*	49-123	42*	20				
EFH (C21-C30)	45*	195*	49-123	72*	20				
EFH (C30-C40)	-83*	287*	49-123	102*	20				
EFH (C8-C11)	82	85	49-123	3	20				
Batch number: 133240637001	Sample number(s): 7273423 UNSPK: P275655 BKG: P275655								
Aluminum	1051 (2)	1147 (2)	75-125	2	20	10,200	13,600	28*	20
Antimony	74*	79	75-125	7	20	3.92 U	3.92 U	0 (1)	20
Arsenic	104	104	75-125	1	20	2.24 J	3.10 J	32* (1)	20
Barium	101	102	75-125	1	20	74.3	106	35*	20
Beryllium	98	98	75-125	0	20	0.305 J	0.508 J	50* (1)	20
Boron	101	102	75-125	1	20	3.96 J	4.13 J	4 (1)	20
Cadmium	97	99	75-125	2	20	0.505 J	0.523 J	3 (1)	20
Calcium	-46 (2)	620 (2)	75-125	35*	20	6,440	6,620	3	20
Chromium	101	110	75-125	5	20	14.0	19.2	31* (1)	20
Cobalt	98	98	75-125	0	20	3.26	4.86	40* (1)	20
Copper	106	105	75-125	0	20	10.4	16.1	43*	20
Iron	1212 (2)	780 (2)	75-125	2	20	17,500	25,200	36*	20
Lead	99	116	75-125	11	20	7.20	9.70	30* (1)	20
Lithium	101	100	75-125	1	20	23.8	33.5	34*	20
Magnesium	204 (2)	212 (2)	75-125	0	20	3,690	5,230	35*	20
Manganese	128 (2)	123 (2)	75-125	1	20	261	323	21*	20
Molybdenum	98	99	75-125	1	20	0.535 J	0.425 J	23* (1)	20
Nickel	100	101	75-125	1	20	6.66	9.32	33* (1)	20
Phosphorus	130*	108	75-125	4	20	390	459	16	20
Potassium	123	126*	75-125	1	20	3,280	4,410	29*	20
Sodium	100	99	75-125	0	20	127	136	7 (1)	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Tin	93	94	75-125	1	20	2.92	J	3.34	J	14 (1)	20
Titanium	225 (2)	236 (2)	75-125	1	20	1,090		1,210		11	20
Vanadium	105	108	75-125	2	20	25.1		34.0		30*	20
Zinc	101	123	75-125	7	20	106		145		31*	20
Zirconium	99	101	75-125	1	20	2.54	J	3.14	J	21* (1)	20
Batch number: 133240637001A	Sample number(s): 7273423 UNSPK: P275655 BKG: P275655										
Silver	108	104	75-125	4	20	0.0304	J	0.196	U	200* (1)	20
Strontium	140*	130*	75-125	3	20	17.8		21.7		20	20
Thallium	110	124	75-125	8	20	0.223		0.286		25* (1)	20
Batch number: 133240637001B	Sample number(s): 7273423 UNSPK: P275655 BKG: P275655										
Selenium	109	104	75-125	5	20	0.124	J	0.119	J	4 (1)	20
Batch number: 133240638002	Sample number(s): 7273423 UNSPK: P275655 BKG: P275655										
3a Mercury 7471A	91	99	65-135	4	20	0.242		0.244		1	20
Batch number: 13322243201A	Sample number(s): 7273423 UNSPK: P275663 BKG: P275663										
2a Chromium VI by EPA 7199	98		75-125			0.32	J	0.31	J	1 (1)	20
Batch number: 13317039401A	Sample number(s): 7273423 BKG: 7273423										
15a pH by 9045D						7.34		7.42		1	3
Batch number: 13323162401A	Sample number(s): 7273419-7273423 BKG: P275655										
14a Moisture Content by 160.3						1.7		1.7		1	20
Batch number: 13322003	Sample number(s): 7273423 UNSPK: P274510										
2378-TCDD	102	103	40-135	0	20						
12378-PeCDD	103	105	40-135	0	20						
123478-HxCDD	101	104	40-135	2	20						
123678-HxCDD	108	105	40-135	4	20						
123789-HxCDD	102	102	40-135	1	20						
1234678-HpCDD	100	102	40-135	1	20						
OCDD	87	95	40-135	4	20						
2378-TCDF	98	99	40-135	0	20						
12378-PeCDF	99	99	40-135	1	20						
23478-PeCDF	99	99	40-135	1	20						
123478-HxCDF	104	104	40-135	1	20						
123678-HxCDF	103	105	40-135	0	20						
123789-HxCDF	104	106	40-135	1	20						
234678-HxCDF	103	103	40-135	1	20						
1234678-HpCDF	103	103	40-135	2	20						
1234789-HpCDF	102	104	40-135	0	20						
OCDF	102	105	40-135	1	20						

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13322SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7273423	93	83	98
Blank	94	84	101
LCS	87	81	99
MS	89	80	95
MSD	93	81	101
Limits:	54-129	59-125	61-125

Analysis Name: 25a Formaldehyde by EPA 8315A
Batch number: 133220001A

	Butyraldehyde
7273423	125
Blank	112
LCS	117
MS	121
MSD	128*
Limits:	64-126

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133260005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7273419	109	108
7273420	112	121*
7273421	108	117
7273422	105	118
7273423	109	121*
Blank	109	121*
LCS	108	117
LCSD	114	129*
MS	102	117
MSD	103	118
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133220013A

	Chlorobenzene	Orthoterphenyl
7273423	88	81
Blank	93	87
LCS	98	94
MS	99	92
MSD	95	91
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433229
Reported: 12/09/13 at 11:17 AM

Surrogate Quality Control

Batch number: 13322003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7273423	59	59	64	71	69	67
Blank	62	57	63	67	65	67
MS	75	76	76	77	77	79
MSD	75	75	75	76	76	78
OPR	60	58	67	72	71	72
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7273423	98	83	94	65	79	79
Blank	83	70	76	60	76	73
MS	83	83	86	81	85	83
MSD	81	81	82	81	82	83
OPR	94	80	92	62	79	80
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7273423	80	105	118	54	59
Blank	74	83	95	52	54
MS	85	91	94	69	74
MSD	85	88	89	68	73
OPR	81	94	112	54	60
Limits:	28-130	23-140	17-157	24-169	24-185

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acct#13013 Cap#1433229 Sample# 7273419-23

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/11/2013
CarrierName: FedEx
AirbillNo: 797131420820

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131111-01
Cooler #: 1 of 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-630A-SA5A-SB-0.0-0.5	11/11/13 13:30	SO	None	1 - SS-Sleeve	10 day										X																					
SL-630C-SA5A-SB-0.0-0.5	11/11/13 14:05	SO	None	1 - SS-Sleeve	10 day										X																					
SL-630B-SA5A-SB-0.0-0.5	11/11/13 13:45	SO	None	1 - SS-Sleeve	10 day										X																					
SL-630D-SA5A-SB-0.0-0.5	11/11/13 14:27	SO	None	1 - SS-Sleeve	10 day										X																					
SL-634-SA5A-SB-0.0-0.5	11/11/13 14:50	SO	None	2 - SS-Sleeve	10 day	X	X				X	X		X	X											X					X				TIC for morpholine only.
SL-634-SA5A-SB-0.0-0.5	11/11/13 14:50	SO	None	2 - 4 oz glass	10 day													X		X															

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
										11/12/13	0920

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C#1433229

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 11/12/13

Time of Receipt: 0920

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.1	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 11/12/13 1050

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 02, 2013

Project: SSFL Phase 3 Sampling

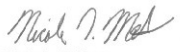
Submittal Date: 11/13/2013
Group Number: 1433660
SDG: PH126
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB2-111213 Water	7275654
SL-628-SA5A-SB-0.0-0.5 Soil	7275655
SL-628-SA5A-SB-0.0-0.5MS Soil	7275656
SL-628-SA5A-SB-0.0-0.5MSD Soil	7275657
SL-628-SA5A-SB-0.0-0.5DUP Soil	7275658
SL-928-SA5A-SB-0.0-0.5 Soil	7275659
SL-628-SA5A-SB-6.5-7.5 Soil	7275660

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,



Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB2-111213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7275654
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:00

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S628T SDG#: PH126-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 12:30	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 12:30	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.41	J	1.7	0.34	1
12969	Anthracene	120-12-7	0.56	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	2.6		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	3.5		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	8.5		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	3.7	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	3.5		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	2.3		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	5.7		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.0	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	7.9		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.5		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	3.3		1.7	0.68	1
12969	Pyrene	129-00-0	6.1		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	23		17	4.4	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Miscellaneous	**SW-846 8015C**		ug/kg		ug/kg	ug/kg	
10604	Ethanol (by Direct Injection)	64-17-5	1,000	U	1,000	200	1
10604	Isopropanol	67-63-0	1,000	U	1,000	200	1
10604	Methanol (by Direct Injection)	67-56-1	480	J	1,000	200	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	40		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,400		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	2.28	J	3.99	0.698	1
06946	Barium	7440-39-3	75.6		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.310	J	0.997	0.0668	1
07914	Boron	7440-42-8	4.03	J	9.97	0.838	1
06949	Cadmium	7440-43-9	0.514	J	0.997	0.0758	1
01650	Calcium	7440-70-2	6,550		19.9	3.33	1
06951	Chromium	7440-47-3	14.2		2.99	0.160	1
06952	Cobalt	7440-48-4	3.31		0.997	0.0987	1
06953	Copper	7440-50-8	10.6		1.99	0.289	1
01654	Iron	7439-89-6	17,800		39.9	3.61	1
06955	Lead	7439-92-1	7.32		2.99	0.499	1
01656	Lithium	7439-93-2	24.2		4.0	0.34	1
01657	Magnesium	7439-95-4	3,750		9.97	1.67	1
06958	Manganese	7439-96-5	266		0.997	0.0828	1
06960	Molybdenum	7439-98-7	0.545	J	1.99	0.170	1
06961	Nickel	7440-02-0	6.77		1.99	0.130	1
10145	Phosphorus	7723-14-0	397		9.97	2.88	1
01662	Potassium	7440-09-7	3,340		99.7	8.32	1
01667	Sodium	7440-23-5	130		99.7	16.7	1
06969	Tin	7440-31-5	2.97	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,100		0.997	0.170	1
06971	Vanadium	7440-62-2	25.5		0.997	0.130	1
06972	Zinc	7440-66-6	108		3.99	0.199	1
10146	Zirconium	7440-67-7	2.58	J	4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.126	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.0309	J	0.199	0.0259	2
06144	Strontium	7440-24-6	18.1		0.399	0.0678	2
06145	Thallium	7440-28-0	0.227		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.247		0.0159	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 18.3 C.	n.a.	8.25		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.102	JBQ	0.990	0.0499	1
11031	12378-PeCDD	40321-76-4	0.263	JBQ	4.95	0.0505	1
11031	123478-HxCDD	39227-28-6	0.327	JB	4.95	0.0593	1
11031	123678-HxCDD	57653-85-7	1.03	JB	4.95	0.0598	1
11031	123789-HxCDD	19408-74-3	0.654	JB	4.95	0.0591	1
11031	1234678-HpCDD	35822-46-9	30.8	B	4.95	0.0636	1
11031	OCDD	3268-87-9	297	B	9.90	0.0690	1
11031	2378-TCDF	51207-31-9	0.990	U	0.990	0.0720	1
11031	12378-PeCDF	57117-41-6	0.922	JB	4.95	0.0339	1
11031	23478-PeCDF	57117-31-4	0.389	JB	4.95	0.0340	1
11031	123478-HxCDF	70648-26-9	0.378	JB	4.95	0.0365	1
11031	123678-HxCDF	57117-44-9	0.262	JB	4.95	0.0336	1
11031	123789-HxCDF	72918-21-9	0.207	JB	4.95	0.0401	1
11031	234678-HxCDF	60851-34-5	0.301	JB	4.95	0.0348	1
11031	1234678-HpCDF	67562-39-4	3.47	JB	4.95	0.0185	1
11031	1234789-HpCDF	55673-89-7	0.266	JBQ	4.95	0.0272	1
11031	OCDF	39001-02-0	8.55	JB	9.90	0.0390	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.894				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLA026	11/22/2013 11:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240012A	11/22/2013 02:09	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240012A	11/20/2013 22:35	Karen L Beyer	1
10604	16a Alcohols by EPA 8015C	SW-846 8015C	1	133230034A	11/19/2013 17:34	Elizabeth J Marin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 20:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	133230034A	11/19/2013 15:00	Elizabeth J Marin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 13:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:07	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:08	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275655
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:34	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:34	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:34	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:34	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275656
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	31		1.7	0.68	1
12969	Acenaphthylene	208-96-8	28		1.7	0.34	1
12969	Anthracene	120-12-7	30		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	30		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	29		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	31		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	27		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	30		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	28		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	27		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	31		18	6.1	1
12969	Chrysene	218-01-9	30		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.7	0.68	1
12969	Diethylphthalate	84-66-2	32		18	6.1	1
12969	Dimethylphthalate	131-11-3	28		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	32		18	6.1	1
12969	Fluoranthene	206-44-0	32		1.7	0.68	1
12969	Fluorene	86-73-7	31		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	31		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	32		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	31		1.7	0.68	1
12969	Naphthalene	91-20-3	34		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	27		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	26		18	6.1	1
12969	Phenanthrene	85-01-8	30		1.7	0.68	1
12969	Pyrene	129-00-0	28		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	160		17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	52		17	4.5	1
13099	PCB-1260	11096-82-5	170		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Miscellaneous	**SW-846 8015C**		ug/kg		ug/kg	ug/kg	
10604	Ethanol (by Direct Injection)	64-17-5	2,500		1,000	200	1
10604	Isopropanol	67-63-0	2,600		1,000	200	1
10604	Methanol (by Direct Injection)	67-56-1	2,600		1,000	200	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	4.7	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	7.6		5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275656
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	17		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	27		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.2	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,500		39.9	7.19	1
06944	Antimony	7440-36-0	36.7		3.99	0.738	1
06935	Arsenic	7440-38-2	17.9		3.99	0.698	1
06946	Barium	7440-39-3	278		0.997	0.0329	1
06947	Beryllium	7440-41-7	5.20		0.997	0.0668	1
07914	Boron	7440-42-8	205		9.97	0.838	1
06949	Cadmium	7440-43-9	5.37		0.997	0.0758	1
01650	Calcium	7440-70-2	6,370		19.9	3.33	1
06951	Chromium	7440-47-3	34.4		2.99	0.160	1
06952	Cobalt	7440-48-4	52.1		0.997	0.0987	1
06953	Copper	7440-50-8	36.9		1.99	0.289	1
01654	Iron	7439-89-6	19,100		39.9	3.61	1
06955	Lead	7439-92-1	22.2		2.99	0.499	1
01656	Lithium	7439-93-2	125		4.0	0.34	1
01657	Magnesium	7439-95-4	4,160		9.97	1.67	1
06958	Manganese	7439-96-5	329		0.997	0.0828	1
06960	Molybdenum	7439-98-7	195		1.99	0.170	1
06961	Nickel	7440-02-0	56.6		1.99	0.130	1
10145	Phosphorus	7723-14-0	526		9.97	2.88	1
01662	Potassium	7440-09-7	4,570		99.7	8.32	1
01667	Sodium	7440-23-5	1,120		99.7	16.7	1
06969	Tin	7440-31-5	374		9.97	0.219	1
06970	Titanium	7440-32-6	1,330		0.997	0.170	1
06971	Vanadium	7440-62-2	77.9		0.997	0.130	1
06972	Zinc	7440-66-6	158		3.99	0.199	1
10146	Zirconium	7440-67-7	102		4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.31		0.399	0.0997	2
06142	Silver	7440-22-4	10.8		0.199	0.0259	2
06144	Strontium	7440-24-6	29.3		0.399	0.0678	2
06145	Thallium	7440-28-0	0.665		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.396		0.0164	0.0098	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275656
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	27.7	B	0.977	0.0861	1
11031	12378-PeCDD	40321-76-4	149	B	4.89	0.103	1
11031	123478-HxCDD	39227-28-6	150	B	4.89	0.0953	1
11031	123678-HxCDD	57653-85-7	150	B	4.89	0.102	1
11031	123789-HxCDD	19408-74-3	147	B	4.89	0.0935	1
11031	1234678-HpCDD	35822-46-9	152	B	4.89	0.0851	1
11031	OCDD	3268-87-9	324	B	9.77	0.0914	1
11031	2378-TCDF	51207-31-9	29.6		0.977	0.144	1
11031	12378-PeCDF	57117-41-6	149	B	4.89	0.0690	1
11031	23478-PeCDF	57117-31-4	149	B	4.89	0.0694	1
11031	123478-HxCDF	70648-26-9	149	B	4.89	0.0771	1
11031	123678-HxCDF	57117-44-9	150	B	4.89	0.0688	1
11031	123789-HxCDF	72918-21-9	149	B	4.89	0.0866	1
11031	234678-HxCDF	60851-34-5	149	B	4.89	0.0767	1
11031	1234678-HpCDF	67562-39-4	149	B	4.89	0.0615	1
11031	1234789-HpCDF	55673-89-7	152	B	4.89	0.100	1
11031	OCDF	39001-02-0	300	B	9.77	0.0865	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275656
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLA026	11/22/2013 12:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240012A	11/22/2013 02:27	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240012A	11/20/2013 22:35	Karen L Beyer	1
10604	16a Alcohols by EPA 8015C	SW-846 8015C	1	133230034A	11/19/2013 18:26	Elizabeth J Marin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 21:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	133230034A	11/19/2013 15:00	Elizabeth J Marin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 14:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:22	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:20	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275656
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:41	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:41	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:41	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:41	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275657
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	34		1.7	0.68	1
12969	Acenaphthylene	208-96-8	32		1.7	0.34	1
12969	Anthracene	120-12-7	35		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	340	E	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	230		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	500	E	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	200		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	87		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	200		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	28		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	33		18	6.1	1
12969	Chrysene	218-01-9	430	E	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	56		1.7	0.68	1
12969	Diethylphthalate	84-66-2	32		18	6.1	1
12969	Dimethylphthalate	131-11-3	31		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	89		18	6.1	1
12969	Fluoranthene	206-44-0	250		1.7	0.68	1
12969	Fluorene	86-73-7	34		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	100		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.68	1
12969	Naphthalene	91-20-3	36		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	31		18	6.1	1
12969	Phenanthrene	85-01-8	37		1.7	0.68	1
12969	Pyrene	129-00-0	230		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	150		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	180		17	4.5	1
13099	PCB-1260	11096-82-5	170		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Miscellaneous	**SW-846 8015C**		ug/kg		ug/kg	ug/kg	
10604	Ethanol (by Direct Injection)	64-17-5	2,500		1,000	200	1
10604	Isopropanol	67-63-0	2,600		1,000	200	1
10604	Methanol (by Direct Injection)	67-56-1	2,700		1,000	200	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.0	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	12		5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275657
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	36		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	84		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.3	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,700		39.9	7.19	1
06944	Antimony	7440-36-0	39.3		3.99	0.738	1
06935	Arsenic	7440-38-2	17.8		3.99	0.698	1
06946	Barium	7440-39-3	280		0.997	0.0329	1
06947	Beryllium	7440-41-7	5.21		0.997	0.0668	1
07914	Boron	7440-42-8	207		9.97	0.838	1
06949	Cadmium	7440-43-9	5.47		0.997	0.0758	1
01650	Calcium	7440-70-2	9,020		19.9	3.33	1
06951	Chromium	7440-47-3	36.3		2.99	0.160	1
06952	Cobalt	7440-48-4	52.2		0.997	0.0987	1
06953	Copper	7440-50-8	36.8		1.99	0.289	1
01654	Iron	7439-89-6	18,600		39.9	3.61	1
06955	Lead	7439-92-1	24.7		2.99	0.499	1
01656	Lithium	7439-93-2	124		4.0	0.34	1
01657	Magnesium	7439-95-4	4,170		9.97	1.67	1
06958	Manganese	7439-96-5	327		0.997	0.0828	1
06960	Molybdenum	7439-98-7	198		1.99	0.170	1
06961	Nickel	7440-02-0	57.0		1.99	0.130	1
10145	Phosphorus	7723-14-0	505		9.97	2.88	1
01662	Potassium	7440-09-7	4,600		99.7	8.32	1
01667	Sodium	7440-23-5	1,120		99.7	16.7	1
06969	Tin	7440-31-5	376		9.97	0.219	1
06970	Titanium	7440-32-6	1,340		0.997	0.170	1
06971	Vanadium	7440-62-2	79.2		0.997	0.130	1
06972	Zinc	7440-66-6	170		3.99	0.199	1
10146	Zirconium	7440-67-7	103		4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.19		0.399	0.0997	2
06142	Silver	7440-22-4	10.4		0.199	0.0259	2
06144	Strontium	7440-24-6	28.5		0.399	0.0678	2
06145	Thallium	7440-28-0	0.723		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.412		0.0167	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275657
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	28.0	B	1.01	0.0608	1
11031	12378-PeCDD	40321-76-4	158	B	5.06	0.0889	1
11031	123478-HxCDD	39227-28-6	157	B	5.06	0.0849	1
11031	123678-HxCDD	57653-85-7	159	B	5.06	0.0850	1
11031	123789-HxCDD	19408-74-3	157	B	5.06	0.0834	1
11031	1234678-HpCDD	35822-46-9	203	B	5.06	0.110	1
11031	OCDD	3268-87-9	768	B	10.1	0.104	1
11031	2378-TCDF	51207-31-9	30.1		1.01	0.0847	1
11031	12378-PeCDF	57117-41-6	159	B	5.06	0.0553	1
11031	23478-PeCDF	57117-31-4	156	B	5.06	0.0523	1
11031	123478-HxCDF	70648-26-9	160	B	5.06	0.0706	1
11031	123678-HxCDF	57117-44-9	157	B	5.06	0.0663	1
11031	123789-HxCDF	72918-21-9	159	B	5.06	0.0727	1
11031	234678-HxCDF	60851-34-5	158	B	5.06	0.0694	1
11031	1234678-HpCDF	67562-39-4	161	B	5.06	0.0549	1
11031	1234789-HpCDF	55673-89-7	158	B	5.06	0.0637	1
11031	OCDF	39001-02-0	328	B	10.1	0.0743	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	88	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	87	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	97	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275657
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLA026	11/22/2013 12:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240012A	11/22/2013 02:46	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240012A	11/20/2013 22:35	Karen L Beyer	1
10604	16a Alcohols by EPA 8015C	SW-846 8015C	1	133230034A	11/19/2013 18:43	Elizabeth J Marin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 21:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	133230034A	11/19/2013 15:00	Elizabeth J Marin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 15:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:24	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275657
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:44	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:44	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:44	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:44	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275658
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		39.9	7.19	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.738	1
06935	Arsenic	7440-38-2	3.15	J	3.99	0.698	1
06946	Barium	7440-39-3	108		0.997	0.0329	1
06947	Beryllium	7440-41-7	0.517	J	0.997	0.0668	1
07914	Boron	7440-42-8	4.20	J	9.97	0.838	1
06949	Cadmium	7440-43-9	0.532	J	0.997	0.0758	1
01650	Calcium	7440-70-2	6,740		19.9	3.33	1
06951	Chromium	7440-47-3	19.6		2.99	0.160	1
06952	Cobalt	7440-48-4	4.95		0.997	0.0987	1
06953	Copper	7440-50-8	16.4		1.99	0.289	1
01654	Iron	7439-89-6	25,700		39.9	3.61	1
06955	Lead	7439-92-1	9.87		2.99	0.499	1
01656	Lithium	7439-93-2	34.0		4.0	0.34	1
01657	Magnesium	7439-95-4	5,320		9.97	1.67	1
06958	Manganese	7439-96-5	329		0.997	0.0828	1
06960	Molybdenum	7439-98-7	0.432	J	1.99	0.170	1
06961	Nickel	7440-02-0	9.48		1.99	0.130	1
10145	Phosphorus	7723-14-0	467		9.97	2.88	1
01662	Potassium	7440-09-7	4,480		99.7	8.32	1
01667	Sodium	7440-23-5	138		99.7	16.7	1
06969	Tin	7440-31-5	3.40	J	9.97	0.219	1
06970	Titanium	7440-32-6	1,240		0.997	0.170	1
06971	Vanadium	7440-62-2	34.6		0.997	0.130	1
06972	Zinc	7440-66-6	147		3.99	0.199	1
10146	Zirconium	7440-67-7	3.19	J	4.99	0.838	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.121	J	0.399	0.0997	2
06142	Silver	7440-22-4	0.199	U	0.199	0.0259	2
06144	Strontium	7440-24-6	22.1		0.399	0.0678	2
06145	Thallium	7440-28-0	0.291		0.199	0.0299	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.248		0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.22		0.0100	0.0100	1
	The pH was measured in water at 18 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275658
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6280 SDG#: PH126-02DUP

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:16	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:39	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:39	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:39	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:39	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	120		17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Miscellaneous	**SW-846 8015C**		ug/kg		ug/kg	ug/kg	
10604	Ethanol (by Direct Injection)	64-17-5	1,000	U	1,000	210	1
10604	Isopropanol	67-63-0	1,000	U	1,000	210	1
10604	Methanol (by Direct Injection)	67-56-1	1,000	U	1,000	210	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	3.4	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	8.9	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,100		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	2.47	J	4.02	0.704	1
06946	Barium	7440-39-3	84.4		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.270	J	1.01	0.0674	1
07914	Boron	7440-42-8	3.17	J	10.1	0.845	1
06949	Cadmium	7440-43-9	0.471	J	1.01	0.0764	1
01650	Calcium	7440-70-2	7,670		20.1	3.36	1
06951	Chromium	7440-47-3	12.9		3.02	0.161	1
06952	Cobalt	7440-48-4	3.23		1.01	0.0995	1
06953	Copper	7440-50-8	6.53		2.01	0.292	1
01654	Iron	7439-89-6	18,500		40.2	3.64	1
06955	Lead	7439-92-1	9.34		3.02	0.503	1
01656	Lithium	7439-93-2	23.6		4.0	0.34	1
01657	Magnesium	7439-95-4	3,770		10.1	1.68	1
06958	Manganese	7439-96-5	263		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.264	J	2.01	0.171	1
06961	Nickel	7440-02-0	6.00		2.01	0.131	1
10145	Phosphorus	7723-14-0	393		10.1	2.91	1
01662	Potassium	7440-09-7	3,300		101	8.39	1
01667	Sodium	7440-23-5	182		101	16.8	1
06969	Tin	7440-31-5	3.00	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,110		1.01	0.171	1
06971	Vanadium	7440-62-2	26.8		1.01	0.131	1
06972	Zinc	7440-66-6	100		4.02	0.201	1
10146	Zirconium	7440-67-7	2.71	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.402	U	0.402	0.101	2
06142	Silver	7440-22-4	0.0308	J	0.201	0.0261	2
06144	Strontium	7440-24-6	21.0		0.402	0.0684	2
06145	Thallium	7440-28-0	0.237		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.181		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.76		0.0100	0.0100	1
	The pH was measured in water at 18.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.192	JBQ	0.992	0.0816	1
11031	12378-PeCDD	40321-76-4	0.860	JBQ	4.96	0.0903	1
11031	123478-HxCDD	39227-28-6	0.574	JB	4.96	0.0741	1
11031	123678-HxCDD	57653-85-7	0.940	JB	4.96	0.0732	1
11031	123789-HxCDD	19408-74-3	0.746	JB	4.96	0.0678	1
11031	1234678-HpCDD	35822-46-9	13.9	B	4.96	0.0759	1
11031	OCDD	3268-87-9	186	B	9.92	0.0934	1
11031	2378-TCDF	51207-31-9	0.355	J	0.992	0.139	1
11031	12378-PeCDF	57117-41-6	1.87	JB	4.96	0.0616	1
11031	23478-PeCDF	57117-31-4	1.10	JB	4.96	0.0595	1
11031	123478-HxCDF	70648-26-9	0.703	JB	4.96	0.0514	1
11031	123678-HxCDF	57117-44-9	0.724	JB	4.96	0.0459	1
11031	123789-HxCDF	72918-21-9	0.846	JBQ	4.96	0.0556	1
11031	234678-HxCDF	60851-34-5	0.983	JB	4.96	0.0483	1
11031	1234678-HpCDF	67562-39-4	1.50	JB	4.96	0.0329	1
11031	1234789-HpCDF	55673-89-7	0.766	JB	4.96	0.0512	1
11031	OCDF	39001-02-0	4.35	JB	9.92	0.0704	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.11				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	44	25 - 164
13C12-12378-PeCDD	48	25 - 181
13C12-123478-HxCDD	57	32 - 141
13C12-123678-HxCDD	57	28 - 130
13C12-123789-HxCDD	58	28 - 130
13C12-1234678-HpCDD	54	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	43	24 - 169
13C12-12378-PeCDF	50	24 - 185
13C12-23478-PeCDF	49	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	58	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	49	26 - 138
13C12-OCDF	46	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLA026	11/22/2013 13:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240012A	11/22/2013 03:04	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240012A	11/20/2013 22:35	Karen L Beyer	1
10604	16a Alcohols by EPA 8015C	SW-846 8015C	1	133230034A	11/19/2013 17:51	Elizabeth J Marin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 20:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	133230034A	11/19/2013 15:00	Elizabeth J Marin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 16:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:45	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:36	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-928-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275659
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 13:40

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S9280 SDG#: PH126-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:51	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:51	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:51	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:51	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.5	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.5	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.72
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Miscellaneous	**SW-846 8015C**		**ug/kg**		**ug/kg**	**ug/kg**	
10604	Ethanol (by Direct Injection)	64-17-5	1,100	U	1,100	220	1
10604	Isopropanol	67-63-0	1,100	U	1,100	220	1
10604	Methanol (by Direct Injection)	67-56-1	1,100	U	1,100	220	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,200		42.3	7.63	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.783	1
06935	Arsenic	7440-38-2	9.20		4.23	0.740	1
06946	Barium	7440-39-3	122		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.684	J	1.06	0.0709	1
07914	Boron	7440-42-8	4.44	J	10.6	0.888	1
06949	Cadmium	7440-43-9	0.306	J	1.06	0.0804	1
01650	Calcium	7440-70-2	4,770		21.2	3.53	1
06951	Chromium	7440-47-3	28.1		3.17	0.169	1
06952	Cobalt	7440-48-4	6.91		1.06	0.105	1
06953	Copper	7440-50-8	17.3		2.12	0.307	1
01654	Iron	7439-89-6	31,500		212	19.1	5
06955	Lead	7439-92-1	12.1		3.17	0.529	1
01656	Lithium	7439-93-2	26.4		4.2	0.36	1
01657	Magnesium	7439-95-4	6,770		10.6	1.77	1
06958	Manganese	7439-96-5	355		1.06	0.0878	1
06960	Molybdenum	7439-98-7	0.329	J	2.12	0.180	1
06961	Nickel	7440-02-0	14.7		2.12	0.137	1
10145	Phosphorus	7723-14-0	555		10.6	3.06	1
01662	Potassium	7440-09-7	2,630		106	8.82	1
01667	Sodium	7440-23-5	147		106	17.7	1
06969	Tin	7440-31-5	3.82	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,370		1.06	0.180	1
06971	Vanadium	7440-62-2	49.3		1.06	0.137	1
06972	Zinc	7440-66-6	77.9		4.23	0.212	1
10146	Zirconium	7440-67-7	4.60	J	5.29	0.888	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.304	J	0.423	0.106	2
06142	Silver	7440-22-4	0.0415	J	0.212	0.0275	2
06144	Strontium	7440-24-6	27.6		0.423	0.0719	2
06145	Thallium	7440-28-0	0.294		0.212	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0138	J	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.90		0.0100	0.0100	1
	The pH was measured in water at 19.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	7.3	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0561	1
11031	12378-PeCDD	40321-76-4	0.0950	JBQ	5.28	0.0411	1
11031	123478-HxCDD	39227-28-6	0.0620	JBQ	5.28	0.0343	1
11031	123678-HxCDD	57653-85-7	0.132	JB	5.28	0.0345	1
11031	123789-HxCDD	19408-74-3	0.211	JB	5.28	0.0339	1
11031	1234678-HpCDD	35822-46-9	0.411	JBQ	5.28	0.0367	1
11031	OCDD	3268-87-9	3.77	JB	10.6	0.0393	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0620	1
11031	12378-PeCDF	57117-41-6	0.179	JB	5.28	0.0248	1
11031	23478-PeCDF	57117-31-4	0.130	JB	5.28	0.0282	1
11031	123478-HxCDF	70648-26-9	0.0888	JB	5.28	0.0284	1
11031	123678-HxCDF	57117-44-9	0.0773	JB	5.28	0.0224	1
11031	123789-HxCDF	72918-21-9	0.172	JBQ	5.28	0.0384	1
11031	234678-HxCDF	60851-34-5	0.103	JBQ	5.28	0.0264	1
11031	1234678-HpCDF	67562-39-4	0.142	JB	5.28	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.145	JB	5.28	0.0375	1
11031	OCDF	39001-02-0	0.614	JB	10.6	0.0812	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0995				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	113	28 - 143
13C12-1234789-HpCDF	40	26 - 138
13C12-OCDF	30	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLA026	11/22/2013 13:34	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLA026	11/18/2013 10:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 16:48	Laura M Krieger	23.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:33	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240012A	11/22/2013 03:23	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240012A	11/20/2013 22:35	Karen L Beyer	1
10604	16a Alcohols by EPA 8015C	SW-846 8015C	1	133230034A	11/19/2013 18:08	Elizabeth J Marin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220013A	11/19/2013 20:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133220013A	11/18/2013 19:00	Sally L Appleyard	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	133230034A	11/19/2013 15:00	Elizabeth J Marin	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 17:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133240637001	11/21/2013 15:52	Eric L Eby	5
06955	Lead	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133240637001	11/21/2013 15:49	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-628-SA5A-SB-6.5-7.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7275660
LL Group # 1433660
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 14:05

Submitted: 11/13/2013 09:40
Reported: 12/02/2013 12:11

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S6286 SDG#: PH126-04*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133240637001	11/21/2013 09:47	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133240637001B	11/21/2013 19:59	John P Hook	2
06142	Silver	SW-846 6020A	1	133240637001A	11/21/2013 19:59	John P Hook	2
06144	Strontium	SW-846 6020A	1	133240637001A	11/21/2013 19:59	John P Hook	2
06145	Thallium	SW-846 6020A	1	133240637001A	11/21/2013 19:59	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133240638002	11/21/2013 13:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133240637001	11/20/2013 21:56	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133240638002	11/21/2013 04:00	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401A	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322SLA026	Sample number(s): 7275655-7275657,7275659-7275660									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	94		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	87		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	95		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	94		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	85		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	103		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	93		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	85		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	91		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	97		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	104		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	91		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	90		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	81		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	99		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	100		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	102		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	108		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	89		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	81		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	93		79-112		
Batch number: 13318B94A	Sample number(s): 7275654									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	110	75-135	1	30
Batch number: 13322A16A	Sample number(s): 7275660									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 133240012A	Sample number(s): 7275655-7275657,7275659-7275660									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	83	76	62-87	8	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	109		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	113		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133230034A	Sample number(s): 7275655-7275657,7275659-7275660									
Ethanol (by Direct Injection)	1,000 U		1,000.	200	ug/kg	102		77-120		
Isopropanol	1,000 U		1,000.	200	ug/kg	103		75-125		
Methanol (by Direct Injection)	1,000 U		1,000.	200	ug/kg	101		62-151		
Batch number: 133220013A	Sample number(s): 7275655-7275657,7275659-7275660									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	97		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	100		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	99		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	73		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	81		60-115		
Batch number: 133240637001	Sample number(s): 7275655-7275660									
Aluminum	40.0	U	40.0	7.21	mg/kg	113		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	109		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	106		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	108		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	109		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	109		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	112		80-120		
Iron	4.05	J	40.0	3.62	mg/kg	105		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	110		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	108		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	107		80-120		
Manganese	1.54		1.00	0.0830	mg/kg	109		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	111		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	110		80-120		
Potassium	100 U		100.	8.34	mg/kg	106		80-120		
Sodium	100 U		100.	16.7	mg/kg	105		80-120		
Tin	1.63	J	10.0	0.220	mg/kg	105		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	109		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	106		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	108		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 133240637001A	Sample number(s): 7275655-7275660									
Silver	0.200	U	0.200	0.0260	mg/kg	108		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	111		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	109		80-120		
Batch number: 133240637001B	Sample number(s): 7275655-7275660									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133240638002	Sample number(s): 7275655-7275660								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	102		85-120		
Batch number: 13317039403A	Sample number(s): 7275655,7275658-7275660								
15a pH by 9045D					100		95-105		
Batch number: 13323162401A	Sample number(s): 7275655-7275660								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13324003	Sample number(s): 7275655-7275657,7275659-7275660								
2378-TCDD	0.0670 J	1.00	0.0645	ng/kg	102		67-158		
12378-PeCDD	0.0804 J	5.00	0.0510	ng/kg	111		70-142		
123478-HxCDD	0.0412 J	5.00	0.0313	ng/kg	110		70-164		
123678-HxCDD	0.0407 J	5.00	0.0321	ng/kg	112		76-134		
123789-HxCDD	0.0742 J	5.00	0.0312	ng/kg	115		64-162		
1234678-HpCDD	0.0721 J	5.00	0.0334	ng/kg	108		70-140		
OCDD	0.213 J	10.0	0.0371	ng/kg	105		78-144		
2378-TCDF	1.00 U	1.00	0.0673	ng/kg	108		75-158		
12378-PeCDF	0.121 J	5.00	0.0308	ng/kg	110		80-134		
23478-PeCDF	0.0714 J	5.00	0.0325	ng/kg	110		68-160		
123478-HxCDF	0.0890 J	5.00	0.0249	ng/kg	109		72-134		
123678-HxCDF	0.0519 J	5.00	0.0221	ng/kg	112		84-130		
123789-HxCDF	0.0575 J	5.00	0.0283	ng/kg	109		78-130		
234678-HxCDF	0.0893 J	5.00	0.0237	ng/kg	112		70-156		
1234678-HpCDF	0.0746 J	5.00	0.0134	ng/kg	108		82-122		
1234789-HpCDF	0.0711 J	5.00	0.0221	ng/kg	110		78-138		
OCDF	0.233 J	10.0	0.0460	ng/kg	111		63-170		
TEQ WHO 2005 - EDLx0.0	0.00970			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13322SLA026	Sample number(s): 7275655-7275657,7275659-7275660 UNSPK: 7275655								
Acenaphthene	90	100	48-127	10	30				
Acenaphthylene	81	92	49-121	12	30				
Anthracene	86	101	52-126	16	30				
Benzo(a)anthracene	80	1001*	44-143	168*	30				
Benzo(a)pyrene	75	658*	44-140	155*	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(b)fluoranthene	66	1440*	26-142	177*	30				
Benzo(e)pyrene	68*	592*	70-130	154*	30				
Benzo(g,h,i)perylene	79	246*	33-141	97*	30				
Benzo(k)fluoranthene	77	569*	54-142	149*	30				
Butylbenzylphthalate	81	83	49-151	3	30				
Di-n-butylphthalate	92	96	52-147	4	30				
Chrysene	72	1248*	29-148	174*	30				
Dibenz(a,h)anthracene	90	161*	20-137	56*	30				
Diethylphthalate	95	95	43-145	0	30				
Dimethylphthalate	83	92	58-129	10	30				
Bis(2-Ethylhexyl)phthalate	94	262*	39-167	94*	30				
Fluoranthene	70	726*	40-148	156*	30				
Fluorene	93	99	51-137	7	30				
Indeno(1,2,3-cd)pyrene	83	289*	17-136	106*	30				
1-Methylnaphthalene	93	102	50-131	9	30				
2-Methylnaphthalene	92	100	35-152	8	30				
Naphthalene	101	106	31-148	5	30				
N-Nitrosodimethylamine	81	87	48-113	8	30				
Di-n-octylphthalate	78	91	52-162	15	30				
Phenanthrene	78	100	29-142	22	30				
Pyrene	65	661*	26-143	157*	30				
Batch number: 13322A16A	Sample number(s): 7275660 UNSPK: P275663								
11a TPH by EPA 8015B GRO	75	72	69-123	6	30				
Batch number: 133240012A	Sample number(s): 7275655-7275657,7275659-7275660 UNSPK: 7275655								
PCB-1016	96	87	41-135	9	50				
PCB-1260	103	102	40-134	0	50				
Batch number: 133230034A	Sample number(s): 7275655-7275657,7275659-7275660 UNSPK: 7275655								
Ethanol (by Direct Injection)	99	97	24-139	2	20				
Isopropanol	102	103	29-135	1	20				
Methanol (by Direct Injection)	84	86	28-141	2	20				
Batch number: 133220013A	Sample number(s): 7275655-7275657,7275659-7275660 UNSPK: 7275655								
EFH (C12-C14)	92	98	49-123	6	20				
EFH (C15-C20)	99	153*	49-123	42*	20				
EFH (C21-C30)	45*	195*	49-123	72*	20				
EFH (C30-C40)	-83*	287*	49-123	102*	20				
EFH (C8-C11)	82	85	49-123	3	20				
Batch number: 133240637001	Sample number(s): 7275655-7275660 UNSPK: 7275655 BKG: 7275655								
Aluminum	1051 (2)	1147 (2)	75-125	2	20	10,200	13,600	28*	20
Antimony	74*	79	75-125	7	20	3.92 U	3.92 U	0 (1)	20
Arsenic	104	104	75-125	1	20	2.24 J	3.10 J	32* (1)	20
Barium	101	102	75-125	1	20	74.3	106	35*	20
Beryllium	98	98	75-125	0	20	0.305 J	0.508 J	50* (1)	20
Boron	101	102	75-125	1	20	3.96 J	4.13 J	4 (1)	20
Cadmium	97	99	75-125	2	20	0.505 J	0.523 J	3 (1)	20
Calcium	-46 (2)	620 (2)	75-125	35*	20	6,440	6,620	3	20
Chromium	101	110	75-125	5	20	14.0	19.2	31* (1)	20

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Quality Control Summary

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Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Cobalt	98	98	75-125	0	20	3.26	4.86	40* (1)	20
Copper	106	105	75-125	0	20	10.4	16.1	43*	20
Iron	1212 (2)	780 (2)	75-125	2	20	17,500	25,200	36*	20
Lead	99	116	75-125	11	20	7.20	9.70	30* (1)	20
Lithium	101	100	75-125	1	20	23.8	33.5	34*	20
Magnesium	204 (2)	212 (2)	75-125	0	20	3,690	5,230	35*	20
Manganese	128 (2)	123 (2)	75-125	1	20	261	323	21*	20
Molybdenum	98	99	75-125	1	20	0.535 J	0.425 J	23* (1)	20
Nickel	100	101	75-125	1	20	6.66	9.32	33* (1)	20
Phosphorus	130*	108	75-125	4	20	390	459	16	20
Potassium	123	126*	75-125	1	20	3,280	4,410	29*	20
Sodium	100	99	75-125	0	20	127	136	7 (1)	20
Tin	93	94	75-125	1	20	2.92 J	3.34 J	14 (1)	20
Titanium	225 (2)	236 (2)	75-125	1	20	1,090	1,210	11	20
Vanadium	105	108	75-125	2	20	25.1	34.0	30*	20
Zinc	101	123	75-125	7	20	106	145	31*	20
Zirconium	99	101	75-125	1	20	2.54 J	3.14 J	21* (1)	20
Batch number: 133240637001A	Sample number(s): 7275655-7275660 UNSPK: 7275655 BKG: 7275655								
Silver	108	104	75-125	4	20	0.0304 J	0.196 U	200* (1)	20
Strontium	140*	130*	75-125	3	20	17.8	21.7	20	20
Thallium	110	124	75-125	8	20	0.223	0.286	25* (1)	20
Batch number: 133240637001B	Sample number(s): 7275655-7275660 UNSPK: 7275655 BKG: 7275655								
Selenium	109	104	75-125	5	20	0.124 J	0.119 J	4 (1)	20
Batch number: 133240638002	Sample number(s): 7275655-7275660 UNSPK: 7275655 BKG: 7275655								
3a Mercury 7471A	91	99	65-135	4	20	0.242	0.244	1	20
Batch number: 13317039403A	Sample number(s): 7275655,7275658-7275660 BKG: 7275655								
15a pH by 9045D						8.25	8.22	0	3
Batch number: 13323162401A	Sample number(s): 7275655-7275660 BKG: 7275655								
14a Moisture Content by 160.3						1.7	1.7	1	20
14a Moisture Content by 160.3						1.7	1.7	1	20
14a Moisture Content by 160.3						1.7	1.7	1	20
Batch number: 13324003	Sample number(s): 7275655-7275657,7275659-7275660 UNSPK: 7275655								
2378-TCDD	101	98	40-135	1	20				
12378-PeCDD	109	111	40-135	6	20				
123478-HxCDD	109	111	40-135	5	20				
123678-HxCDD	109	112	40-135	6	20				
123789-HxCDD	107	110	40-135	7	20				
1234678-HpCDD	89	121	40-135	28*	20				
OCDD	10*	166*	40-135	81*	20				
2378-TCDF	108	106	40-135	2	20				
12378-PeCDF	108	112	40-135	7	20				
23478-PeCDF	109	110	40-135	4	20				
123478-HxCDF	109	113	40-135	7	20				
123678-HxCDF	110	110	40-135	4	20				
123789-HxCDF	109	112	40-135	6	20				

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
234678-HxCDF	109	112	40-135	6	20				
1234678-HpCDF	106	112	40-135	8	20				
1234789-HpCDF	111	111	40-135	3	20				
OCDF	106	113	40-135	9	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13322SLA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7275655	88	79	94
7275656	89	80	95
7275657	93	81	101
7275659	87	79	94
7275660	89	80	96
Blank	94	84	101
LCS	87	81	99
MS	89	80	95
MSD	93	81	101
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13318B94A

	Trifluorotoluene-F
7275654	85
Blank	84
LCS	94
LCSD	93
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13322A16A

	Trifluorotoluene-F
7275660	89
Blank	103
LCS	94
MS	96
MSD	89

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Surrogate Quality Control

Limits: 50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133240012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275655	113	111
7275656	101	112
7275657	96	103
7275659	105	94
7275660	113	109
Blank	118	118
LCS	114	113
LCSD	113	118
MS	101	112
MSD	96	103
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133220013A

	Chlorobenzene	Orthoterphenyl
7275655	95	97
7275656	99	92
7275657	95	91
7275659	99	83
7275660	86	75
Blank	93	87
LCS	98	94
MS	99	92
MSD	95	91
Limits:	37-125	66-123

Analysis Name: 16a Alcohols by EPA 8015C
Batch number: 133230034A

	Acetone
7275655	107
7275656	102
7275657	104
7275659	104
7275660	102
Blank	114
LCS	104
MS	102
MSD	104
Limits:	42-138

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13324003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7275655	69	71	80	86	82	80

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433660
Reported: 12/02/13 at 12:11 PM

Surrogate Quality Control

7275656	66	72	81	88	85	82
7275657	84	81	87	92	91	97
7275659	44	49	53	58	58	55
7275660	61	63	68	87	74	57
Blank	71	74	80	90	88	81
MS	66	72	81	88	85	82
MSD	84	81	87	92	91	97
OPR	59	67	77	82	80	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7275655	92	67	66	70	79	81
7275656	96	68	68	69	85	84
7275657	95	84	86	72	87	88
7275659	69	49	46	48	57	57
7275660	113	40	30	62	76	77
Blank	107	70	69	77	90	90
MS	96	68	68	69	85	84
MSD	95	84	86	72	87	88
OPR	98	73	71	65	83	82
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7275655	79	74	72	70	77	
7275656	84	75	74	67	77	
7275657	85	82	85	82	83	
7275659	58	54	52	43	50	
7275660	77	69	60	58	76	
Blank	88	84	81	69	83	
MS	84	75	74	67	77	
MSD	85	82	85	82	83	
OPR	77	80	80	58	70	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Gp# 14336660 sample# 7275654-60

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/12/2013

CarrierName:

AirbillNo:

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20131112-03

Cooler #: 3

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB2-111213	11/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-628-SA5A-SB-0.0-0.5MS	11/12/13 13:40	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X											X		X								
SL-628-SA5A-SB-0.0-0.5MS	11/12/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-928-SA5A-SB-0.0-0.5	11/12/13 13:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X		X								
SL-928-SA5A-SB-0.0-0.5	11/12/13 13:40	SO	None	1 - 4 oz glass	10 day													X																		
SL-628-SA5A-SB-6.5-7.5	11/12/13 14:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X		X								
SL-628-SA5A-SB-6.5-7.5	11/12/13 14:05	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.12.13	1600									
										11/13/13	0940

eurofins | Lancaster Laboratories

C#14336060

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 11/13/13

Time of Receipt: 0940

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.4	TB	WI	Y	B	
2	↓	0.4	↓	↓	↓	↓	
3	↓	0.4	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/13/13 1044

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 09, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/13/2013
Group Number: 1433661
SDG: PH127
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB1-111213 Water	7275661
SL-560-SA5D-SB-0.0-0.5 Soil	7275662
SL-560-SA5D-SB-4.0-5.0 Soil	7275663
SL-560-SA5D-SB-4.0-5.0MS Soil	7275664
SL-560-SA5D-SB-4.0-5.0MSD Soil	7275665
SL-560-SA5D-SB-4.0-5.0SS Soil	7275666
SL-560-SA5D-SB-4.0-5.0IS Soil	7275667
SL-560-SA5D-SB-4.0-5.0PDS Soil	7275668
SL-560-SA5D-SB-4.0-5.0DUP Soil	7275669
SL-560-SA5D-SB-7.0-8.0 Soil	7275670
SL-860-SA5D-SB-4.0-5.0 Soil	7275671
SL-549-SA5D-SB-0.0-0.5 Soil	7275672
SL-549-SA5D-SB-4.0-5.0 Soil	7275673
SL-549-SA5D-SB-11.0-12.0 Soil	7275674
TB1-111213 Water	7275675

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
10461	Acenaphthene	83-32-9	0.5	U	0.5	0.1	1
10461	Acenaphthylene	208-96-8	0.5	U	0.5	0.1	1
10461	Aniline	62-53-3	1	U	1	0.5	1
10461	Anthracene	120-12-7	0.5	U	0.5	0.1	1
10461	Benzidine	92-87-5	61	U	61	20	1
10461	Benzo(a)anthracene	56-55-3	0.5	U	0.5	0.1	1
10461	Benzo(a)pyrene	50-32-8	0.5	U	0.5	0.1	1
10461	Benzo(b)fluoranthene	205-99-2	0.5	U	0.5	0.1	1
10461	Benzo(g,h,i)perylene	191-24-2	0.5	U	0.5	0.1	1
10461	Benzo(k)fluoranthene	207-08-9	0.5	U	0.5	0.1	1
10461	Benzoic acid	65-85-0	15	U	15	6	1
10461	Benzyl alcohol	100-51-6	15	U	15	5	1
10461	1,1'-Biphenyl	92-52-4	1	U	1	0.5	1
10461	4-Bromophenyl-phenylether	101-55-3	1	U	1	0.5	1
10461	Butylbenzylphthalate	85-68-7	5	U	5	2	1
10461	Di-n-butylphthalate	84-74-2	5	U	5	2	1
10461	Carbazole	86-74-8	1	U	1	0.5	1
10461	4-Chloro-3-methylphenol	59-50-7	1	U	1	0.5	1
10461	4-Chloroaniline	106-47-8	1	U	1	0.5	1
10461	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	0.5	1
10461	bis(2-Chloroethyl)ether	111-44-4	1	U	1	0.5	1
10461	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10461	2-Chloronaphthalene	91-58-7	1	U	1	0.4	1
10461	2-Chlorophenol	95-57-8	1	U	1	0.5	1
10461	4-Chlorophenyl-phenylether	7005-72-3	1	U	1	0.5	1
10461	Chrysene	218-01-9	0.5	U	0.5	0.1	1
10461	Dibenz(a,h)anthracene	53-70-3	0.5	U	0.5	0.1	1
10461	Dibenzofuran	132-64-9	1	U	1	0.5	1
10461	1,2-Dichlorobenzene	95-50-1	1	U	1	0.5	1
10461	1,3-Dichlorobenzene	541-73-1	1	U	1	0.5	1
10461	1,4-Dichlorobenzene	106-46-7	1	U	1	0.5	1
10461	3,3'-Dichlorobenzidine	91-94-1	5	U	5	2	1
10461	2,4-Dichlorophenol	120-83-2	1	U	1	0.5	1
10461	2,6-Dichlorophenol	87-65-0	1	U	1	0.5	1
10461	Diethylphthalate	84-66-2	5	U	5	2	1
10461	2,4-Dimethylphenol	105-67-9	1	U	1	0.5	1
10461	3,5-Dimethylphenol	108-68-9	10	U	10	3	1
10461	Dimethylphthalate	131-11-3	5	U	5	2	1
10461	4,6-Dinitro-2-methylphenol	534-52-1	15	U	15	5	1
10461	2,4-Dinitrophenol	51-28-5	31	U	31	10	1
10461	1,2-Diphenylhydrazine	122-66-7	1	U	1	0.5	1
10461	bis(2-Ethylhexyl)phthalate	117-81-7	5	U	5	2	1
10461	Fluoranthene	206-44-0	0.5	U	0.5	0.1	1
10461	Fluorene	86-73-7	0.5	U	0.5	0.1	1
10461	Hexachlorobenzene	118-74-1	0.5	U	0.5	0.1	1
10461	Hexachlorobutadiene	87-68-3	1	U	1	0.5	1
10461	Hexachlorocyclopentadiene	77-47-4	15	U	15	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
10461	Hexachloroethane	67-72-1	5	U	5	1	1
10461	Indeno(1,2,3-cd)pyrene	193-39-5	0.5	U	0.5	0.1	1
10461	Isophorone	78-59-1	1	U	1	0.5	1
10461	1-Methylnaphthalene	90-12-0	0.5	U	0.5	0.1	1
10461	2-Methylnaphthalene	91-57-6	0.5	U	0.5	0.1	1
10461	2-Methylphenol	95-48-7	1	U	1	0.5	1
10461	4-Methylphenol	106-44-5	1	U	1	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10461	Naphthalene	91-20-3	0.5	U	0.5	0.1	1
10461	NDPA as diphenylamine	n.a.	5	U	5	2	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	2-Nitroaniline	88-74-4	1	U	1	0.5	1
10461	3-Nitroaniline	99-09-2	1	U	1	0.5	1
10461	4-Nitroaniline	100-01-6	1	U	1	0.5	1
10461	Nitrobenzene	98-95-3	1	U	1	0.5	1
10461	2-Nitrophenol	88-75-5	1	U	1	0.5	1
10461	4-Nitrophenol	100-02-7	31	U	31	10	1
10461	N-Nitrosodimethylamine	62-75-9	5	U	5	2	1
10461	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	0.5	1
10461	N-Nitrosodiphenylamine	86-30-6	1	U	1	0.5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10461	Di-n-octylphthalate	117-84-0	5	U	5	2	1
10461	Pentachlorophenol	87-86-5	5	U	5	1	1
10461	Phenanthrene	85-01-8	0.5	U	0.5	0.1	1
10461	Phenol	108-95-2	1	U	1	0.5	1
10461	Pyrene	129-00-0	0.5	U	0.5	0.1	1
10461	Pyridine	110-86-1	5	U	5	2	1
10461	1,2,4-Trichlorobenzene	120-82-1	1	U	1	0.5	1
10461	2,4,5-Trichlorophenol	95-95-4	1	U	1	0.5	1
10461	2,4,6-Trichlorophenol	88-06-2	1	U	1	0.5	1
	2,6-Dichlorophenol and 3,5-Dimethylphenol were not spiked into the associated QC. The client was contacted and the data reported.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.051	U	0.051	0.010	1
12971	Acenaphthylene	208-96-8	0.051	U	0.051	0.010	1
12971	Anthracene	120-12-7	0.051	U	0.051	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.051	U	0.051	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.051	U	0.051	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.051	U	0.051	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.051	U	0.051	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.051	U	0.051	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.051	U	0.051	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.051	1
12971	Di-n-butylphthalate	84-74-2	0.19	J	1.0	0.051	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Chrysene	218-01-9	0.051	U	0.051	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.051	U	0.051	0.010	1
12971	Diethylphthalate	84-66-2	0.37	J	1.0	0.051	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.051	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	1.0	U	1.0	0.051	1
12971	Fluoranthene	206-44-0	0.051	U	0.051	0.010	1
12971	Fluorene	86-73-7	0.051	U	0.051	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.051	U	0.051	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.051	U	0.051	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.051	U	0.051	0.010	1
12971	Naphthalene	91-20-3	0.051	U	0.051	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.051	U	0.051	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.051	1
12971	Phenanthrene	85-01-8	0.051	U	0.051	0.031	1
12971	Pyrene	129-00-0	0.051	U	0.051	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.50	U	0.50	0.16	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.25	1
10407	2,4-DB	94-82-6	0.99	U	0.99	0.30	1
10407	Dicamba	1918-00-9	0.30	U	0.30	0.079	1
10407	Dinoseb	88-85-7	0.50	U	0.50	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.50	U	0.50	0.16	1
10407	MCPA	94-74-6	200	U	200	50	1
10407	MCPP	93-65-2	200	U	200	50	1
10407	2,4,5-T	93-76-5	0.050	U	0.050	0.015	1
10407	2,4,5-TP	93-72-1	0.050	U	0.050	0.0099	1
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Aldrin	309-00-2	0.0092	U	0.0092	0.0018	1
10589	Alpha BHC	319-84-6	0.0092	U	0.0092	0.0028	1
10589	Beta BHC	319-85-7	0.0092	U	0.0092	0.0031	1
10589	Gamma BHC - Lindane	58-89-9	0.0092	U	0.0092	0.0018	1
10589	Chlordane	57-74-9	0.46	U	0.46	0.15	1
10589	p,p-DDD	72-54-8	0.018	U	0.018	0.0046	1
10589	p,p-DDE	72-55-9	0.018	U	0.018	0.0046	1
10589	p,p-DDT	50-29-3	0.018	U	0.018	0.0048	1
10589	Delta BHC	319-86-8	0.0092	U	0.0092	0.0031	1
10589	Dieldrin	60-57-1	0.018	U	0.018	0.0049	1
10589	Endosulfan I	959-98-8	0.0092	U	0.0092	0.0039	1
10589	Endosulfan II	33213-65-9	0.018	U	0.018	0.014	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**		**ug/l**	**ug/l**	
10589	Endosulfan Sulfate	1031-07-8	0.018	U	0.018	0.0053	1
10589	Endrin	72-20-8	0.018	U	0.018	0.0074	1
10589	Endrin Aldehyde	7421-93-4	0.092	U	0.092	0.018	1
10589	Endrin Ketone	53494-70-5	0.018	U	0.018	0.0046	1
10589	Heptachlor	76-44-8	0.0092	U	0.0092	0.0018	1
10589	Heptachlor Epoxide	1024-57-3	0.0092	U	0.0092	0.0021	1
10589	Methoxychlor	72-43-5	0.092	U	0.092	0.028	1
10589	Mirex	2385-85-5	0.046	U	0.046	0.0092	1
10589	Toxaphene	8001-35-2	0.92	U	0.92	0.28	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.46	U	0.46	0.092	1
13092	Aroclor 5442	12642-23-8	0.46	U	0.46	0.092	1
13092	Aroclor 5460	11126-42-4	0.46	U	0.46	0.10	1
13092	PCB-1016	12674-11-2	0.46	U	0.46	0.092	1
13092	PCB-1221	11104-28-2	0.46	U	0.46	0.092	1
13092	PCB-1232	11141-16-5	0.46	U	0.46	0.18	1
13092	PCB-1242	53469-21-9	0.46	U	0.46	0.092	1
13092	PCB-1248	12672-29-6	0.46	U	0.46	0.092	1
13092	PCB-1254	11097-69-1	0.46	U	0.46	0.092	1
13092	PCB-1260	11096-82-5	0.46	U	0.46	0.14	1
13092	PCB-1262	37324-23-5	0.46	U	0.46	0.18	1
13092	PCB-1268	11100-14-4	0.46	U	0.46	0.15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.097	1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.049	1
Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.00034	J	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.0349	J	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

*=This limit was used in the evaluation of the final result

Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
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CDM Federal Programs Corp.
3201 Jermantown Road
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560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.0168 J	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.0	0.010	0.010	1

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Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

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Account # 13013

Project Name: SSFL Phase 3 Sampling

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3201 Jermantown Road
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560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.717	JBQ	1.99	0.522	1
10915	12378-PeCDD	40321-76-4	1.28	JB	9.95	0.390	1
10915	123478-HxCDD	39227-28-6	9.95	U	9.95	0.278	1
10915	123678-HxCDD	57653-85-7	0.661	JBQ	9.95	0.292	1
10915	123789-HxCDD	19408-74-3	9.95	U	9.95	0.275	1
10915	1234678-HpCDD	35822-46-9	1.00	JBQ	9.95	0.342	1
10915	OCDD	3268-87-9	0.851	JBQ	19.9	0.366	1
10915	2378-TCDF	51207-31-9	1.99	U	1.99	0.362	1
10915	12378-PeCDF	57117-41-6	0.895	JBQ	9.95	0.230	1
10915	23478-PeCDF	57117-31-4	0.345	JBQ	9.95	0.211	1
10915	123478-HxCDF	70648-26-9	0.641	JBQ	9.95	0.229	1
10915	123678-HxCDF	57117-44-9	0.622	JBQ	9.95	0.219	1
10915	123789-HxCDF	72918-21-9	0.756	JBQ	9.95	0.244	1
10915	234678-HxCDF	60851-34-5	0.664	JBQ	9.95	0.217	1
10915	1234678-HpCDF	67562-39-4	0.885	JBQ	9.95	0.113	1
10915	1234789-HpCDF	55673-89-7	0.846	JBQ	9.95	0.133	1
10915	OCDF	39001-02-0	1.81	JBQ	19.9	0.461	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	1.28				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	93	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

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560EB SDG#: PH127-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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SSFL Phase 3 Subarea 5D

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560EB SDG#: PH127-01EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10461	8b SVOCs by EPA 8270D	SW-846 8270D	1	13322WAB026	11/25/2013 00:40	Catherine E Bachman	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322WAA026	11/23/2013 15:58	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13322WAA026	11/18/2013 15:00	Seth A Farrier	1
11010	8270D BNA Extraction	SW-846 3510C	1	13322WAB026	11/18/2013 15:00	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 12:55	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 12:55	Marie D Beamenderfer	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	133200033A	11/20/2013 14:31	Melissa McDermott	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	133220007A	11/19/2013 20:01	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133220008A	11/20/2013 14:51	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133220008A	11/18/2013 15:00	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	133220007A	11/18/2013 15:00	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	133200033A	11/18/2013 09:30	William H Saadeh	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220028A	11/19/2013 16:15	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133220028A	11/19/2013 02:30	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13323002	11/22/2013 12:24	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13323002	11/19/2013 09:30	Deborah M Zimmerman	1
01743	Aluminum	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07044	Antimony	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07035	Arsenic	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07046	Barium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07047	Beryllium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
08014	Boron	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07052	Cobalt	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07053	Copper	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01754	Iron	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07055	Lead	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01756	Lithium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01757	Magnesium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1

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Sample Description: EB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275661
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 15:00 by PH

Submitted: 11/13/2013 09:40
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3201 Jermantown Road
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560EB SDG#: PH127-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07058	Manganese	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07060	Molybdenum	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01762	Potassium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
01767	Sodium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07069	Tin	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07070	Titanium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
07072	Zinc	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
10144	Zirconium	SW-846 6010C	1	133240635002	11/22/2013 00:27	John W Yanzuk II	1
06041	Selenium	SW-846 6020A	1	133240639002B	11/22/2013 22:22	John P Hook	1
06042	Silver	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
06044	Strontium	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
06045	Thallium	SW-846 6020A	1	133240639002A	11/22/2013 22:22	John P Hook	1
00259	3b Mercury 7470A	SW-846 7470A	1	133255713006	11/22/2013 06:37	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133240635002	11/21/2013 11:55	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133240639002	11/21/2013 12:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133245713003	11/20/2013 16:45	Nelli S Markaryan	1
05713	WW SW846 Hg Digest	SW-846 7470A	2	133255713006	11/21/2013 16:40	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	2	13317987301B	11/13/2013 13:23	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13318002201A	11/14/2013 11:23	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	370	U	370	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	780	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	370	U	370	190	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	19	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	74	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	74	1
10726	Carbazole	86-74-8	37	U	37	19	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	19	1
10726	4-Chloroaniline	106-47-8	37	U	37	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	37	U	37	19	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	19	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	19	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	19	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	19	1
10726	Diethylphthalate	84-66-2	190	U	190	74	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	37	1
10726	Dimethylphthalate	131-11-3	190	U	190	74	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	740	U	740	340	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	74	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	190	U	190	37	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	37	U	37	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	37	U	37	19	1
10726	4-Methylphenol	106-44-5	37	U	37	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	37	U	37	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	74	1
10726	4-Nitroaniline	100-01-6	190	U	190	74	1
10726	Nitrobenzene	98-95-3	37	U	37	19	1
10726	2-Nitrophenol	88-75-5	37	U	37	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	74	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	19	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	74	1
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	37	U	37	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	74	1
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	19	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	19	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	19	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	40	U	40	13	1
10401	Dalapon	75-99-0	100	U	100	49	1
10401	2,4-DB	94-82-6	19	U	19	6.9	1
10401	Dicamba	1918-00-9	13	U	13	4.5	1
10401	Dinoseb	88-85-7	27	U	27	10	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	19	U	19	10	1
10401	MCPA	94-74-6	2,800	U	2,800	850	1
10401	MCPP (Mecoprop)	93-65-2	2,800	U	2,800	840	1
10401	2,4,5-T	93-76-5	1.9	U	1.9	0.92	1
10401	2,4,5-TP	93-72-1	1.9	U	1.9	0.84	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,900		43.4	7.82	1
06944	Antimony	7440-36-0	4.34	U	4.34	0.803	1
06935	Arsenic	7440-38-2	9.70		4.34	0.759	1
06946	Barium	7440-39-3	156		1.08	0.0358	1
06947	Beryllium	7440-41-7	1.36		1.08	0.0727	1
07914	Boron	7440-42-8	8.20	J	10.8	0.911	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0824	1
01650	Calcium	7440-70-2	6,910		21.7	3.62	1
06951	Chromium	7440-47-3	42.4		3.25	0.174	1
06952	Cobalt	7440-48-4	10.4		1.08	0.107	1
06953	Copper	7440-50-8	14.9		2.17	0.315	1
01654	Iron	7439-89-6	39,300		86.8	7.85	2
06955	Lead	7439-92-1	12.2		3.25	0.542	1
01656	Lithium	7439-93-2	31.5		4.3	0.37	1
01657	Magnesium	7439-95-4	8,150		10.8	1.81	1
06958	Manganese	7439-96-5	487		1.08	0.0900	1
06960	Molybdenum	7439-98-7	0.227	J	2.17	0.184	1
06961	Nickel	7440-02-0	24.4		2.17	0.141	1
10145	Phosphorus	7723-14-0	308		10.8	3.14	1
01662	Potassium	7440-09-7	4,120		108	9.05	1
01667	Sodium	7440-23-5	128		108	18.1	1
06969	Tin	7440-31-5	3.29	J	10.8	0.239	1
06970	Titanium	7440-32-6	1,430		1.08	0.184	1
06971	Vanadium	7440-62-2	80.0		1.08	0.141	1
06972	Zinc	7440-66-6	81.7		4.34	0.217	1
10146	Zirconium	7440-67-7	8.71		5.42	0.911	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.231	J	0.434	0.108	2
06142	Silver	7440-22-4	0.0568	J	0.217	0.0282	2
06144	Strontium	7440-24-6	36.4		0.434	0.0738	2
06145	Thallium	7440-28-0	0.421		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.55		0.45	0.16	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.34		0.0100	0.0100	1
	The pH was measured in water at 19 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
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Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0539	1
11031	12378-PeCDD	40321-76-4	0.0938	JBQ	5.34	0.0493	1
11031	123478-HxCDD	39227-28-6	5.34	U	5.34	0.0320	1
11031	123678-HxCDD	57653-85-7	0.129	JBQ	5.34	0.0344	1
11031	123789-HxCDD	19408-74-3	0.145	JB	5.34	0.0330	1
11031	1234678-HpCDD	35822-46-9	0.230	JBQ	5.34	0.0342	1
11031	OCDD	3268-87-9	0.895	JB	10.7	0.0447	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0555	1
11031	12378-PeCDF	57117-41-6	0.129	JBQ	5.34	0.0287	1
11031	23478-PeCDF	57117-31-4	0.0461	JBQ	5.34	0.0322	1
11031	123478-HxCDF	70648-26-9	0.0548	JBQ	5.34	0.0265	1
11031	123678-HxCDF	57117-44-9	0.0729	JB	5.34	0.0209	1
11031	123789-HxCDF	72918-21-9	0.298	JBQ	5.34	0.0316	1
11031	234678-HxCDF	60851-34-5	0.102	JBQ	5.34	0.0241	1
11031	1234678-HpCDF	67562-39-4	0.0577	JBQ	5.34	0.0125	1
11031	1234789-HpCDF	55673-89-7	0.136	JBQ	5.34	0.0364	1
11031	OCDF	39001-02-0	0.413	JB	10.7	0.0826	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0221				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	93	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	124	28 - 143
13C12-1234789-HpCDF	46	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
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CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

560-0 SDG#: PH127-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 22:28	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 05:09	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 16:45	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 20:55	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 16:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 18:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/23/2013 09:21	Eric L Eby	2
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275662
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-0 SDG#: PH127-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:51	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:56	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:56	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 17:08	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	34	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.4	J	1.1	0.2	26.04
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	45	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	770	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		40.1	7.22	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.741	1
06935	Arsenic	7440-38-2	5.64		4.01	0.701	1
06946	Barium	7440-39-3	61.7		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.668	J	1.00	0.0671	1
07914	Boron	7440-42-8	1.90	J	10.0	0.842	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0761	1
01650	Calcium	7440-70-2	2,270		20.0	3.35	1
06951	Chromium	7440-47-3	16.4		3.01	0.160	1
06952	Cobalt	7440-48-4	3.18		1.00	0.0992	1
06953	Copper	7440-50-8	5.94		2.00	0.291	1
01654	Iron	7439-89-6	21,200		40.1	3.63	1
06955	Lead	7439-92-1	6.33		3.01	0.501	1
01656	Lithium	7439-93-2	12.7		4.0	0.34	1
01657	Magnesium	7439-95-4	3,520		10.0	1.67	1
06958	Manganese	7439-96-5	148		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.261	J	2.00	0.170	1
06961	Nickel	7440-02-0	8.12		2.00	0.130	1
10145	Phosphorus	7723-14-0	134		10.0	2.90	1
01662	Potassium	7440-09-7	2,100		100	8.36	1
01667	Sodium	7440-23-5	132		100	16.7	1
06969	Tin	7440-31-5	2.97	J	10.0	0.220	1
06970	Titanium	7440-32-6	989		1.00	0.170	1
06971	Vanadium	7440-62-2	33.1		1.00	0.130	1
06972	Zinc	7440-66-6	45.6		4.01	0.200	1
10146	Zirconium	7440-67-7	4.11	J	5.01	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	U	0.401	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0261	2
06144	Strontium	7440-24-6	13.2		0.401	0.0681	2
06145	Thallium	7440-28-0	0.224		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.33	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.40		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 19.3 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 22:51	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 03:32	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 19:57	Laura M Krieger	26.04
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:36	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 17:11	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:14	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 16:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275663
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:27	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:42	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:42	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 17:15	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403B	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,700		18	3	1
10726	Acenaphthylene	208-96-8	1,800		18	3	1
10726	Aniline	62-53-3	1,000		340	170	1
10726	Anthracene	120-12-7	1,700		18	3	1
10726	Benzidine	92-87-5	3,800		1,700	720	1
10726	Benzo(a)anthracene	56-55-3	1,700		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,800		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,800		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	1,800		520	170	1
10726	Benzyl alcohol	100-51-6	1,600		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,600		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,700		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,800		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,800		170	69	1
10726	Carbazole	86-74-8	1,700		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,800		34	17	1
10726	4-Chloroaniline	106-47-8	910		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,200		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,400		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,400		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,100		34	7	1
10726	2-Chlorophenol	95-57-8	1,600		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		34	17	1
10726	Chrysene	218-01-9	1,600		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,800		18	3	1
10726	Dibenzofuran	132-64-9	1,700		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,500		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	860		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,800		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,800		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,800		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,700		170	34	1
10726	Dimethylphthalate	131-11-3	1,700		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,500		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,600		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,800		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		180	69	1
10726	Fluoranthene	206-44-0	1,700		18	3	1
10726	Fluorene	86-73-7	1,700		18	3	1
10726	Hexachlorobenzene	118-74-1	1,800		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,800		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	4,100		520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,500	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,800	18	3	1
10726	Isophorone	78-59-1	1,800	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,800	18	3	1
10726	2-Methylnaphthalene	91-57-6	1,600	18	3	1
10726	2-Methylphenol	95-48-7	1,500	34	17	1
10726	4-Methylphenol	106-44-5	1,400	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,600	18	3	1
10726	NDPA as diphenylamine	n.a.	1,700	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,700	34	17	1
10726	3-Nitroaniline	99-09-2	1,600	170	69	1
10726	4-Nitroaniline	100-01-6	1,200	170	69	1
10726	Nitrobenzene	98-95-3	1,800	34	17	1
10726	2-Nitrophenol	88-75-5	1,700	34	17	1
10726	4-Nitrophenol	100-02-7	1,700	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,200	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,500	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,800	170	69	1
10726	Pentachlorophenol	87-86-5	1,300	180	34	1
10726	Phenanthrene	85-01-8	1,700	18	3	1
10726	Phenol	108-95-2	1,400	34	17	1
10726	Pyrene	129-00-0	1,700	18	3	1
10726	Pyridine	110-86-1	1,000	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,800	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,700	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,700	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	36	1.7	0.69	1
12969	Acenaphthylene	208-96-8	35	1.7	0.34	1
12969	Anthracene	120-12-7	35	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	35	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	36	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	32	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	31	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	40	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	40	19	6.2	1
12969	Chrysene	218-01-9	35	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	33	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	38		19	6.2	1
12969	Dimethylphthalate	131-11-3	36		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		19	6.2	1
12969	Fluoranthene	206-44-0	35		1.7	0.69	1
12969	Fluorene	86-73-7	35		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.69	1
12969	Naphthalene	91-20-3	34		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	32		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.2	1
12969	Phenanthrene	85-01-8	34		1.7	0.69	1
12969	Pyrene	129-00-0	34		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.9		1.0	0.2	25.1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	100		37	12	1
10401	Dalapon	75-99-0	160		93	45	1
10401	2,4-DB	94-82-6	99		18	6.4	1
10401	Dicamba	1918-00-9	8.1	J	12	4.1	1
10401	Dinoseb	88-85-7	39		25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		18	9.3	1
10401	MCPA	94-74-6	8,300		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	8,300		2,600	770	1
10401	2,4,5-T	93-76-5	9.3		1.8	0.85	1
10401	2,4,5-TP	93-72-1	9.3		1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	160		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	160		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.3	J	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	6.7		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	11		10	4.1	1
12952	EFH (C8-C11)	n.a.	3.6	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		41.3	7.44	1
06944	Antimony	7440-36-0	32.0		4.13	0.764	1
06935	Arsenic	7440-38-2	19.9		4.13	0.722	1
06946	Barium	7440-39-3	273		1.03	0.0341	1
06947	Beryllium	7440-41-7	5.87		1.03	0.0691	1
07914	Boron	7440-42-8	205		10.3	0.867	1
06949	Cadmium	7440-43-9	4.98		1.03	0.0784	1
01650	Calcium	7440-70-2	2,810		20.6	3.45	1
06951	Chromium	7440-47-3	34.6		3.10	0.165	1
06952	Cobalt	7440-48-4	53.7		1.03	0.102	1
06953	Copper	7440-50-8	29.9		2.06	0.299	1
01654	Iron	7439-89-6	19,400		41.3	3.74	1
06955	Lead	7439-92-1	19.9		3.10	0.516	1
01656	Lithium	7439-93-2	117		4.1	0.35	1
01657	Magnesium	7439-95-4	3,920		10.3	1.72	1
06958	Manganese	7439-96-5	212		1.03	0.0857	1
06960	Molybdenum	7439-98-7	197		2.06	0.175	1
06961	Nickel	7440-02-0	58.2		2.06	0.134	1
10145	Phosphorus	7723-14-0	402		10.3	2.98	1
01662	Potassium	7440-09-7	3,770		103	8.61	1
01667	Sodium	7440-23-5	1,120		103	17.2	1
06969	Tin	7440-31-5	376		10.3	0.227	1
06970	Titanium	7440-32-6	1,260		1.03	0.175	1
06971	Vanadium	7440-62-2	82.4		1.03	0.134	1
06972	Zinc	7440-66-6	102		4.13	0.206	1
10146	Zirconium	7440-67-7	105		5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.34		0.413	0.103	2
06142	Silver	7440-22-4	11.5		0.206	0.0268	2
06144	Strontium	7440-24-6	22.7		0.413	0.0702	2
06145	Thallium	7440-28-0	0.666		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.180		0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 23:15	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 04:04	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 20:35	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 17:38	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:32	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275664
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:39	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/27/2013 09:43	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:49	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:08	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	1,700		18	3	1
10726	Acenaphthylene	208-96-8	1,900		18	3	1
10726	Aniline	62-53-3	1,200		340	170	1
10726	Anthracene	120-12-7	1,800		18	3	1
10726	Benzidine	92-87-5	3,900		1,700	720	1
10726	Benzo(a)anthracene	56-55-3	1,600		18	3	1
10726	Benzo(a)pyrene	50-32-8	1,800		18	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,900		18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,700		18	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		18	3	1
10726	Benzoic acid	65-85-0	2,100		520	170	1
10726	Benzyl alcohol	100-51-6	1,700		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,600		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,800		34	17	1
10726	Butylbenzylphthalate	85-68-7	1,700		170	69	1
10726	Di-n-butylphthalate	84-74-2	1,800		170	69	1
10726	Carbazole	86-74-8	1,700		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,900		34	17	1
10726	4-Chloroaniline	106-47-8	1,100		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,300		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,600		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	2,200		34	7	1
10726	2-Chlorophenol	95-57-8	1,800		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,800		34	17	1
10726	Chrysene	218-01-9	1,600		18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		18	3	1
10726	Dibenzofuran	132-64-9	1,800		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,700		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,600		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,600		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	560		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,900		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,800		170	69	1
10726	2,4-Dimethylphenol	105-67-9	1,900		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,800		170	34	1
10726	Dimethylphthalate	131-11-3	1,800		170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,500		520	170	1
10726	2,4-Dinitrophenol	51-28-5	2,400		680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,800		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		180	69	1
10726	Fluoranthene	206-44-0	1,700		18	3	1
10726	Fluorene	86-73-7	1,800		18	3	1
10726	Hexachlorobenzene	118-74-1	1,800		18	3	1
10726	Hexachlorobutadiene	87-68-3	1,800		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	4,100		520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		ug/kg	ug/kg	ug/kg	
10726	Hexachloroethane	67-72-1	1,700	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	18	3	1
10726	Isophorone	78-59-1	1,800	34	17	1
10726	1-Methylnaphthalene	90-12-0	1,900	18	3	1
10726	2-Methylnaphthalene	91-57-6	1,700	18	3	1
10726	2-Methylphenol	95-48-7	1,700	34	17	1
10726	4-Methylphenol	106-44-5	1,600	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10726	Naphthalene	91-20-3	1,700	18	3	1
10726	NDPA as diphenylamine	n.a.	1,800	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	2-Nitroaniline	88-74-4	1,800	34	17	1
10726	3-Nitroaniline	99-09-2	1,800	170	69	1
10726	4-Nitroaniline	100-01-6	1,200	170	69	1
10726	Nitrobenzene	98-95-3	1,900	34	17	1
10726	2-Nitrophenol	88-75-5	1,800	34	17	1
10726	4-Nitrophenol	100-02-7	1,900	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,500	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,700	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,800	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10726	Di-n-octylphthalate	117-84-0	1,900	170	69	1
10726	Pentachlorophenol	87-86-5	1,300	180	34	1
10726	Phenanthrene	85-01-8	1,700	18	3	1
10726	Phenol	108-95-2	1,600	34	17	1
10726	Pyrene	129-00-0	1,700	18	3	1
10726	Pyridine	110-86-1	1,200	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	1,800	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,700	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,800	34	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35	1.7	0.69	1
12969	Acenaphthylene	208-96-8	35	1.7	0.34	1
12969	Anthracene	120-12-7	35	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	35	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	35	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	31	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	30	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	41	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	41	19	6.2	1
12969	Chrysene	218-01-9	34	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	32	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	36		19	6.2	1
12969	Dimethylphthalate	131-11-3	35		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	43		19	6.2	1
12969	Fluoranthene	206-44-0	34		1.7	0.69	1
12969	Fluorene	86-73-7	34		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	32		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	34		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.69	1
12969	Naphthalene	91-20-3	33		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	39		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	34		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.4		1.0	0.2	24.46
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	99		37	12	1
10401	Dalapon	75-99-0	160		93	45	1
10401	2,4-DB	94-82-6	98		18	6.4	1
10401	Dicamba	1918-00-9	7.7	J	12	4.1	1
10401	Dinoseb	88-85-7	37		25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	110		18	9.3	1
10401	MCPA	94-74-6	8,000		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	7,900		2,600	770	1
10401	2,4,5-T	93-76-5	9.4		1.8	0.85	1
10401	2,4,5-TP	93-72-1	9.2		1.8	0.77	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	160		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	160		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.1	J	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	6.4		5.1	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.1	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	3.5	J	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		39.7	7.15	1
06944	Antimony	7440-36-0	23.6		3.97	0.734	1
06935	Arsenic	7440-38-2	24.8		3.97	0.695	1
06946	Barium	7440-39-3	289		0.992	0.0327	1
06947	Beryllium	7440-41-7	6.08		0.992	0.0665	1
07914	Boron	7440-42-8	198		9.92	0.834	1
06949	Cadmium	7440-43-9	4.62		0.992	0.0754	1
01650	Calcium	7440-70-2	5,410		19.8	3.31	1
06951	Chromium	7440-47-3	44.9		2.98	0.159	1
06952	Cobalt	7440-48-4	52.3		0.992	0.0982	1
06953	Copper	7440-50-8	37.4		1.98	0.288	1
01654	Iron	7439-89-6	30,800		79.4	7.18	2
06955	Lead	7439-92-1	25.3		2.98	0.496	1
01656	Lithium	7439-93-2	118		4.0	0.34	1
01657	Magnesium	7439-95-4	5,770		9.92	1.66	1
06958	Manganese	7439-96-5	243		0.992	0.0824	1
06960	Molybdenum	7439-98-7	186		1.98	0.169	1
06961	Nickel	7440-02-0	61.1		1.98	0.129	1
10145	Phosphorus	7723-14-0	270		9.92	2.87	1
01662	Potassium	7440-09-7	4,000		99.2	8.28	1
01667	Sodium	7440-23-5	1,160		99.2	16.6	1
06969	Tin	7440-31-5	350		9.92	0.218	1
06970	Titanium	7440-32-6	1,430		0.992	0.169	1
06971	Vanadium	7440-62-2	98.7		0.992	0.129	1
06972	Zinc	7440-66-6	118		3.97	0.198	1
10146	Zirconium	7440-67-7	102		4.96	0.834	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.29		0.397	0.0992	2
06142	Silver	7440-22-4	10.2		0.198	0.0258	2
06144	Strontium	7440-24-6	32.0		0.397	0.0675	2
06145	Thallium	7440-28-0	0.785		0.198	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.174		0.0164	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/24/2013 23:39	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 04:37	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 21:12	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:37	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:04	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 21:51	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/23/2013 09:17	Eric L Eby	2
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275665
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:43	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/27/2013 09:45	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:51	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:10	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0SS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275666
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	40.6	2.0	0.72	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 17:37	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0IS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275667
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	842	41.0	14.3	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13322243201A	11/19/2013 18:05	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0PDS Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275668
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	45.0	4.2	1.5	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:12	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		40.5	7.29	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	5.14		4.05	0.708	1
06946	Barium	7440-39-3	61.5		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.640	J	1.01	0.0678	1
07914	Boron	7440-42-8	1.78	J	10.1	0.850	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0769	1
01650	Calcium	7440-70-2	2,230		20.2	3.38	1
06951	Chromium	7440-47-3	16.3		3.04	0.162	1
06952	Cobalt	7440-48-4	3.29		1.01	0.100	1
06953	Copper	7440-50-8	5.79		2.02	0.293	1
01654	Iron	7439-89-6	20,800		40.5	3.66	1
06955	Lead	7439-92-1	5.97		3.04	0.506	1
01656	Lithium	7439-93-2	12.8		4.0	0.34	1
01657	Magnesium	7439-95-4	3,510		10.1	1.69	1
06958	Manganese	7439-96-5	154		1.01	0.0840	1
06960	Molybdenum	7439-98-7	2.02	U	2.02	0.172	1
06961	Nickel	7440-02-0	8.18		2.02	0.132	1
10145	Phosphorus	7723-14-0	135		10.1	2.92	1
01662	Potassium	7440-09-7	2,210		101	8.44	1
01667	Sodium	7440-23-5	135		101	16.9	1
06969	Tin	7440-31-5	3.01	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,020		1.01	0.172	1
06971	Vanadium	7440-62-2	32.5		1.01	0.132	1
06972	Zinc	7440-66-6	44.7		4.05	0.202	1
10146	Zirconium	7440-67-7	4.58	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.405	U	0.405	0.101	2
06142	Silver	7440-22-4	0.202	U	0.202	0.0263	2
06144	Strontium	7440-24-6	14.3		0.405	0.0688	2
06145	Thallium	7440-28-0	0.243		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.32	J	0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.46		0.0100	0.0100	1
	The pH was measured in water at 19.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:35	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:46	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:46	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275669
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:20 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

560-4 SDG#: PH127-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:26	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403B	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	34	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.3	J	1	0.2	23.72
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	93	U	93	46	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,700		39.8	7.17	1
06944	Antimony	7440-36-0	3.98	U	3.98	0.736	1
06935	Arsenic	7440-38-2	5.76		3.98	0.696	1
06946	Barium	7440-39-3	44.7		0.994	0.0328	1
06947	Beryllium	7440-41-7	0.601	J	0.994	0.0666	1
07914	Boron	7440-42-8	1.76	J	9.94	0.835	1
06949	Cadmium	7440-43-9	0.994	U	0.994	0.0756	1
01650	Calcium	7440-70-2	2,420		19.9	3.32	1
06951	Chromium	7440-47-3	19.4		2.98	0.159	1
06952	Cobalt	7440-48-4	2.42		0.994	0.0984	1
06953	Copper	7440-50-8	8.67		1.99	0.288	1
01654	Iron	7439-89-6	15,700		39.8	3.60	1
06955	Lead	7439-92-1	6.10		2.98	0.497	1
01656	Lithium	7439-93-2	8.8		4.0	0.34	1
01657	Magnesium	7439-95-4	2,770		9.94	1.66	1
06958	Manganese	7439-96-5	103		0.994	0.0825	1
06960	Molybdenum	7439-98-7	0.213	J	1.99	0.169	1
06961	Nickel	7440-02-0	8.56		1.99	0.129	1
10145	Phosphorus	7723-14-0	169		9.94	2.87	1
01662	Potassium	7440-09-7	1,400		99.4	8.29	1
01667	Sodium	7440-23-5	150		99.4	16.6	1
06969	Tin	7440-31-5	2.36	J	9.94	0.219	1
06970	Titanium	7440-32-6	655		0.994	0.169	1
06971	Vanadium	7440-62-2	28.1		0.994	0.129	1
06972	Zinc	7440-66-6	35.2		3.98	0.199	1
10146	Zirconium	7440-67-7	3.30	J	4.97	0.835	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.398	U	0.398	0.0994	2
06142	Silver	7440-22-4	0.199	U	0.199	0.0259	2
06144	Strontium	7440-24-6	11.4		0.398	0.0676	2
06145	Thallium	7440-28-0	0.245		0.199	0.0298	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.32	J	0.41	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.22		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 19 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:03	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 05:42	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 17:26	Laura M Krieger	23.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:38	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:31	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:09	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 17:59	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-560-SA5D-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275670
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:35 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S5607 SDG#: PH127-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 20:55	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 14:58	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 14:58	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:12	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:40	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	350	U	350	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	730	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	3	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	350	U	350	170	1
10726	1,1'-Biphenyl	92-52-4	35	U	35	17	1
10726	4-Bromophenyl-phenylether	101-55-3	35	U	35	17	1
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	35	U	35	17	1
10726	4-Chloro-3-methylphenol	59-50-7	35	U	35	17	1
10726	4-Chloroaniline	106-47-8	35	U	35	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	35	U	35	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	35	U	35	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	35	U	35	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	35	U	35	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	17	1
10726	Chrysene	218-01-9	18	U	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	35	U	35	17	1
10726	1,2-Dichlorobenzene	95-50-1	35	U	35	17	1
10726	1,3-Dichlorobenzene	541-73-1	35	U	35	17	1
10726	1,4-Dichlorobenzene	106-46-7	35	U	35	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	350	U	350	100	1
10726	2,4-Dichlorophenol	120-83-2	35	U	35	17	1
10726	2,6-Dichlorophenol	87-65-0	35	U	35	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	35	U	35	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	35	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	690	U	690	310	1
10726	1,2-Diphenylhydrazine	122-66-7	35	U	35	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	18	U	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	35	U	35	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	170	U	170	35	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	35	U	35	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	35	U	35	17	1
10726	4-Methylphenol	106-44-5	35	U	35	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	35	U	35	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	35	U	35	17	1
10726	2-Nitrophenol	88-75-5	35	U	35	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	35	U	35	17	1
10726	N-Nitrosodiphenylamine	86-30-6	35	U	35	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	35	1
10726	Phenanthrene	85-01-8	18	U	18	3	1
10726	Phenol	108-95-2	35	U	35	17	1
10726	Pyrene	129-00-0	18	U	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,4-Trichlorobenzene	120-82-1	35	U	35	17	1
10726	2,4,5-Trichlorophenol	95-95-4	35	U	35	17	1
10726	2,4,6-Trichlorophenol	88-06-2	35	U	35	17	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	24.7
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	38	U	38	13	1
10401	Dalapon	75-99-0	94	U	94	46	1
10401	2,4-DB	94-82-6	18	U	18	6.5	1
10401	Dicamba	1918-00-9	13	U	13	4.2	1
10401	Dinoseb	88-85-7	25	U	25	9.4	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.4	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300		40.1	7.22	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.741	1
06935	Arsenic	7440-38-2	5.98		4.01	0.701	1
06946	Barium	7440-39-3	61.3		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.618	J	1.00	0.0671	1
07914	Boron	7440-42-8	1.94	J	10.0	0.841	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0761	1
01650	Calcium	7440-70-2	2,770		20.0	3.35	1
06951	Chromium	7440-47-3	18.2		3.00	0.160	1
06952	Cobalt	7440-48-4	3.53		1.00	0.0992	1
06953	Copper	7440-50-8	6.97		2.00	0.290	1
01654	Iron	7439-89-6	21,400		40.1	3.63	1
06955	Lead	7439-92-1	6.82		3.00	0.501	1
01656	Lithium	7439-93-2	12.5		4.0	0.34	1
01657	Magnesium	7439-95-4	3,760		10.0	1.67	1
06958	Manganese	7439-96-5	160		1.00	0.0831	1
06960	Molybdenum	7439-98-7	2.00	U	2.00	0.170	1
06961	Nickel	7440-02-0	9.08		2.00	0.130	1
10145	Phosphorus	7723-14-0	198		10.0	2.89	1
01662	Potassium	7440-09-7	2,510		100	8.35	1
01667	Sodium	7440-23-5	136		100	16.7	1
06969	Tin	7440-31-5	2.85	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,070		1.00	0.170	1
06971	Vanadium	7440-62-2	32.7		1.00	0.130	1
06972	Zinc	7440-66-6	49.9		4.01	0.200	1
10146	Zirconium	7440-67-7	3.96	J	5.01	0.841	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.401	U	0.401	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0260	2
06144	Strontium	7440-24-6	14.4		0.401	0.0681	2
06145	Thallium	7440-28-0	0.291		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.34	J	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.50		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 18.8 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	4.0	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:27	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 06:14	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 18:04	Laura M Krieger	24.7
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:40	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:40	Mitchell R Washel	n.a.
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133220036A	11/20/2013 18:58	Melissa McDermott	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:28	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133220036A	11/19/2013 09:00	David S Schrum	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 18:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-860-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275671
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 09:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

860-4 SDG#: PH127-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:07	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:05	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:05	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13322243201A	11/19/2013 18:54	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13322243201A	11/18/2013 20:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Acenaphthene	83-32-9	18	U	18	4	1
10726	Acenaphthylene	208-96-8	18	U	18	4	1
10726	Aniline	62-53-3	360	U	360	180	1
10726	Anthracene	120-12-7	18	U	18	4	1
10726	Benzidine	92-87-5	1,800	U	1,800	750	1
10726	Benzo(a)anthracene	56-55-3	18	U	18	4	1
10726	Benzo(a)pyrene	50-32-8	18	U	18	4	1
10726	Benzo(b)fluoranthene	205-99-2	18	U	18	4	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	4	1
10726	Benzo(k)fluoranthene	207-08-9	18	U	18	4	1
10726	Benzoic acid	65-85-0	540	U	540	180	1
10726	Benzyl alcohol	100-51-6	360	U	360	180	1
10726	1,1'-Biphenyl	92-52-4	36	U	36	18	1
10726	4-Bromophenyl-phenylether	101-55-3	36	U	36	18	1
10726	Butylbenzylphthalate	85-68-7	180	U	180	72	1
10726	Di-n-butylphthalate	84-74-2	180	U	180	72	1
10726	Carbazole	86-74-8	36	U	36	18	1
10726	4-Chloro-3-methylphenol	59-50-7	36	U	36	18	1
10726	4-Chloroaniline	106-47-8	36	U	36	18	1
10726	bis(2-Chloroethoxy)methane	111-91-1	36	U	36	18	1
10726	bis(2-Chloroethyl)ether	111-44-4	36	U	36	18	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	36	U	36	18	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	35	U	35	8	1
10726	2-Chlorophenol	95-57-8	36	U	36	18	1
10726	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	18	1
10726	Chrysene	218-01-9	18	U	18	4	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	4	1
10726	Dibenzofuran	132-64-9	36	U	36	18	1
10726	1,2-Dichlorobenzene	95-50-1	36	U	36	18	1
10726	1,3-Dichlorobenzene	541-73-1	36	U	36	18	1
10726	1,4-Dichlorobenzene	106-46-7	36	U	36	18	1
10726	3,3'-Dichlorobenzidine	91-94-1	360	U	360	110	1
10726	2,4-Dichlorophenol	120-83-2	36	U	36	18	1
10726	2,6-Dichlorophenol	87-65-0	36	U	36	18	1
10726	Diethylphthalate	84-66-2	180	U	180	72	1
10726	2,4-Dimethylphenol	105-67-9	36	U	36	18	1
10726	3,5-Dimethylphenol	108-68-9	180	U	180	36	1
10726	Dimethylphthalate	131-11-3	180	U	180	72	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	540	U	540	180	1
10726	2,4-Dinitrophenol	51-28-5	710	U	710	320	1
10726	1,2-Diphenylhydrazine	122-66-7	36	U	36	18	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	72	1
10726	Fluoranthene	206-44-0	18	U	18	4	1
10726	Fluorene	86-73-7	18	U	18	4	1
10726	Hexachlorobenzene	118-74-1	18	U	18	4	1
10726	Hexachlorobutadiene	87-68-3	36	U	36	18	1
10726	Hexachlorocyclopentadiene	77-47-4	540	U	540	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	180	U	180	36	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	4	1
10726	Isophorone	78-59-1	36	U	36	18	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	4	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	4	1
10726	2-Methylphenol	95-48-7	36	U	36	18	1
10726	4-Methylphenol	106-44-5	36	U	36	18	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	4	1
10726	NDPA as diphenylamine	n.a.	180	U	180	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	36	U	36	18	1
10726	3-Nitroaniline	99-09-2	180	U	180	72	1
10726	4-Nitroaniline	100-01-6	180	U	180	72	1
10726	Nitrobenzene	98-95-3	36	U	36	18	1
10726	2-Nitrophenol	88-75-5	36	U	36	18	1
10726	4-Nitrophenol	100-02-7	540	U	540	180	1
10726	N-Nitrosodimethylamine	62-75-9	180	U	180	72	1
10726	N-Nitroso-di-n-propylamine	621-64-7	36	U	36	18	1
10726	N-Nitrosodiphenylamine	86-30-6	36	U	36	18	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	180	U	180	72	1
10726	Pentachlorophenol	87-86-5	180	U	180	36	1
10726	Phenanthrene	85-01-8	18	U	18	4	1
10726	Phenol	108-95-2	36	U	36	18	1
10726	Pyrene	129-00-0	18	U	18	4	1
10726	Pyridine	110-86-1	180	U	180	72	1
10726	1,2,4-Trichlorobenzene	120-82-1	36	U	36	18	1
10726	2,4,5-Trichlorophenol	95-95-4	36	U	36	18	1
10726	2,4,6-Trichlorophenol	88-06-2	36	U	36	18	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.1	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	0.49	J	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.3	J	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.64	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		42.1	7.58	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.778	1
06935	Arsenic	7440-38-2	11.8		4.21	0.736	1
06946	Barium	7440-39-3	111		1.05	0.0347	1
06947	Beryllium	7440-41-7	0.839	J	1.05	0.0705	1
07914	Boron	7440-42-8	3.76	J	10.5	0.884	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0799	1
01650	Calcium	7440-70-2	2,800		21.0	3.51	1
06951	Chromium	7440-47-3	27.5		3.16	0.168	1
06952	Cobalt	7440-48-4	6.60		1.05	0.104	1
06953	Copper	7440-50-8	12.5		2.10	0.305	1
01654	Iron	7439-89-6	25,500		42.1	3.81	1
06955	Lead	7439-92-1	8.15		3.16	0.526	1
01656	Lithium	7439-93-2	20.9		4.2	0.36	1
01657	Magnesium	7439-95-4	5,190		10.5	1.76	1
06958	Manganese	7439-96-5	311		1.05	0.0873	1
06960	Molybdenum	7439-98-7	0.429	J	2.10	0.179	1
06961	Nickel	7440-02-0	15.8		2.10	0.137	1
10145	Phosphorus	7723-14-0	318		10.5	3.04	1
01662	Potassium	7440-09-7	4,140		105	8.77	1
01667	Sodium	7440-23-5	88.5	J	105	17.6	1
06969	Tin	7440-31-5	2.91	J	10.5	0.231	1
06970	Titanium	7440-32-6	1,210		1.05	0.179	1
06971	Vanadium	7440-62-2	47.4		1.05	0.137	1
06972	Zinc	7440-66-6	61.4		4.21	0.210	1
10146	Zirconium	7440-67-7	5.26		5.26	0.884	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.234	J	0.421	0.105	2
06142	Silver	7440-22-4	0.0281	J	0.210	0.0274	2
06144	Strontium	7440-24-6	28.4		0.421	0.0715	2
06145	Thallium	7440-28-0	0.372		0.210	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175	U	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.92		0.0100	0.0100	1
	The pH was measured in water at 19 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.8	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0671	1
11031	12378-PeCDD	40321-76-4	0.148	JBQ	5.28	0.0594	1
11031	123478-HxCDD	39227-28-6	0.0851	JB	5.28	0.0471	1
11031	123678-HxCDD	57653-85-7	0.741	JBQ	5.28	0.0495	1
11031	123789-HxCDD	19408-74-3	1.15	JB	5.28	0.0477	1
11031	1234678-HpCDD	35822-46-9	2.13	JB	5.28	0.0441	1
11031	OCDD	3268-87-9	24.1	B	10.6	0.0369	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0734	1
11031	12378-PeCDF	57117-41-6	0.609	JB	5.28	0.0322	1
11031	23478-PeCDF	57117-31-4	0.108	JBQ	5.28	0.0344	1
11031	123478-HxCDF	70648-26-9	0.0668	JBQ	5.28	0.0389	1
11031	123678-HxCDF	57117-44-9	0.120	JB	5.28	0.0308	1
11031	123789-HxCDF	72918-21-9	1.60	JB	5.28	0.0484	1
11031	234678-HxCDF	60851-34-5	0.114	JBQ	5.28	0.0336	1
11031	1234678-HpCDF	67562-39-4	0.564	JBQ	5.28	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.120	JBQ	5.28	0.0410	1
11031	OCDF	39001-02-0	1.37	JBQ	10.6	0.0897	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.343				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	115	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 00:51	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 06:47	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 15:49	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 22:46	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 19:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 19:29	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275672
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:25 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-0 SDG#: PH127-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:11	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:07	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:07	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:20	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	380	U	380	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,900	U	1,900	790	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	380	U	380	190	1
10726	1,1'-Biphenyl	92-52-4	38	U	38	19	1
10726	4-Bromophenyl-phenylether	101-55-3	38	U	38	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	75	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	75	1
10726	Carbazole	86-74-8	38	U	38	19	1
10726	4-Chloro-3-methylphenol	59-50-7	38	U	38	19	1
10726	4-Chloroaniline	106-47-8	38	U	38	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	38	U	38	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	38	U	38	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	38	U	38	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	38	U	38	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	38	U	38	19	1
10726	1,2-Dichlorobenzene	95-50-1	38	U	38	19	1
10726	1,3-Dichlorobenzene	541-73-1	38	U	38	19	1
10726	1,4-Dichlorobenzene	106-46-7	38	U	38	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	380	U	380	110	1
10726	2,4-Dichlorophenol	120-83-2	38	U	38	19	1
10726	2,6-Dichlorophenol	87-65-0	38	U	38	19	1
10726	Diethylphthalate	84-66-2	190	U	190	75	1
10726	2,4-Dimethylphenol	105-67-9	38	U	38	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	38	1
10726	Dimethylphthalate	131-11-3	190	U	190	75	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	740	U	740	340	1
10726	1,2-Diphenylhydrazine	122-66-7	38	U	38	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	75	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	38	U	38	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	190	U	190	38	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	38	U	38	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	38	U	38	19	1
10726	4-Methylphenol	106-44-5	38	U	38	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	38	U	38	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	75	1
10726	4-Nitroaniline	100-01-6	190	U	190	75	1
10726	Nitrobenzene	98-95-3	38	U	38	19	1
10726	2-Nitrophenol	88-75-5	38	U	38	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	75	1
10726	N-Nitroso-di-n-propylamine	621-64-7	38	U	38	19	1
10726	N-Nitrosodiphenylamine	86-30-6	38	U	38	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	75	1
10726	Pentachlorophenol	87-86-5	190	U	190	38	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	38	U	38	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	75	1
10726	1,2,4-Trichlorobenzene	120-82-1	38	U	38	19	1
10726	2,4,5-Trichlorophenol	95-95-4	38	U	38	19	1
10726	2,4,6-Trichlorophenol	88-06-2	38	U	38	19	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	21.93
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.93	U	0.93	0.19	1
10590	Alpha BHC	319-84-6	0.93	U	0.93	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.93	U	0.93	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.93	U	0.93	0.51	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.93	U	0.93	0.25	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.68	1
10590	Heptachlor	76-44-8	0.93	U	0.93	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.93	U	0.93	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,000		43.7	7.88	1
06944	Antimony	7440-36-0	4.37	U	4.37	0.809	1
06935	Arsenic	7440-38-2	13.3		4.37	0.765	1
06946	Barium	7440-39-3	116		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.972	J	1.09	0.0733	1
07914	Boron	7440-42-8	3.24	J	10.9	0.918	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0831	1
01650	Calcium	7440-70-2	2,520		21.9	3.65	1
06951	Chromium	7440-47-3	27.9		3.28	0.175	1
06952	Cobalt	7440-48-4	6.54		1.09	0.108	1
06953	Copper	7440-50-8	11.0		2.19	0.317	1
01654	Iron	7439-89-6	26,800		43.7	3.96	1
06955	Lead	7439-92-1	7.86		3.28	0.547	1
01656	Lithium	7439-93-2	23.4		4.4	0.37	1
01657	Magnesium	7439-95-4	5,390		10.9	1.83	1
06958	Manganese	7439-96-5	336		1.09	0.0907	1
06960	Molybdenum	7439-98-7	0.314	J	2.19	0.186	1
06961	Nickel	7440-02-0	17.7		2.19	0.142	1
10145	Phosphorus	7723-14-0	229		10.9	3.16	1
01662	Potassium	7440-09-7	3,450		109	9.12	1
01667	Sodium	7440-23-5	114		109	18.3	1
06969	Tin	7440-31-5	3.16	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,220		1.09	0.186	1
06971	Vanadium	7440-62-2	50.1		1.09	0.142	1
06972	Zinc	7440-66-6	58.8		4.37	0.219	1
10146	Zirconium	7440-67-7	5.84		5.47	0.918	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.437	0.109	2
06142	Silver	7440-22-4	0.0498	J	0.219	0.0284	2
06144	Strontium	7440-24-6	27.3		0.437	0.0743	2
06145	Thallium	7440-28-0	0.368		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 19.2 C.	n.a.	7.31	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
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Project Name: SSFL Phase 3 Sampling

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0685 JBQ	1.12	0.0422	1
11031	12378-PeCDD	40321-76-4	0.204 JBQ	5.61	0.0416	1
11031	123478-HxCDD	39227-28-6	0.0601 JB	5.61	0.0274	1
11031	123678-HxCDD	57653-85-7	0.136 JBQ	5.61	0.0287	1
11031	123789-HxCDD	19408-74-3	0.0891 JBQ	5.61	0.0280	1
11031	1234678-HpCDD	35822-46-9	0.521 JB	5.61	0.0383	1
11031	OCDD	3268-87-9	4.58 JB	11.2	0.0396	1
11031	2378-TCDF	51207-31-9	0.0495 J	1.12	0.0471	1
11031	12378-PeCDF	57117-41-6	0.223 JBQ	5.61	0.0242	1
11031	23478-PeCDF	57117-31-4	0.153 JBQ	5.61	0.0277	1
11031	123478-HxCDF	70648-26-9	0.107 JBQ	5.61	0.0247	1
11031	123678-HxCDF	57117-44-9	0.100 JB	5.61	0.0196	1
11031	123789-HxCDF	72918-21-9	0.200 JBQ	5.61	0.0305	1
11031	234678-HxCDF	60851-34-5	0.0671 JB	5.61	0.0229	1
11031	1234678-HpCDF	67562-39-4	0.158 JBQ	5.61	0.0109	1
11031	1234789-HpCDF	55673-89-7	0.0547 JBQ	5.61	0.0324	1
11031	OCDF	39001-02-0	0.660 JB	11.2	0.0734	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0345			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	117	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

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CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 01:15	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 07:19	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 18:41	Laura M Krieger	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:41	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:41	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 16:34	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 23:05	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 19:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/24/2013 20:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275673
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 10:40 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549-4 SDG#: PH127-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:15	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:10	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:10	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	19	U	19	4	1
10726	Acenaphthylene	208-96-8	19	U	19	4	1
10726	Aniline	62-53-3	370	U	370	190	1
10726	Anthracene	120-12-7	19	U	19	4	1
10726	Benzidine	92-87-5	1,800	U	1,800	780	1
10726	Benzo(a)anthracene	56-55-3	19	U	19	4	1
10726	Benzo(a)pyrene	50-32-8	19	U	19	4	1
10726	Benzo(b)fluoranthene	205-99-2	19	U	19	4	1
10726	Benzo(g,h,i)perylene	191-24-2	19	U	19	4	1
10726	Benzo(k)fluoranthene	207-08-9	19	U	19	4	1
10726	Benzoic acid	65-85-0	560	U	560	190	1
10726	Benzyl alcohol	100-51-6	370	U	370	190	1
10726	1,1'-Biphenyl	92-52-4	37	U	37	19	1
10726	4-Bromophenyl-phenylether	101-55-3	37	U	37	19	1
10726	Butylbenzylphthalate	85-68-7	190	U	190	74	1
10726	Di-n-butylphthalate	84-74-2	190	U	190	74	1
10726	Carbazole	86-74-8	37	U	37	19	1
10726	4-Chloro-3-methylphenol	59-50-7	37	U	37	19	1
10726	4-Chloroaniline	106-47-8	37	U	37	19	1
10726	bis(2-Chloroethoxy)methane	111-91-1	37	U	37	19	1
10726	bis(2-Chloroethyl)ether	111-44-4	37	U	37	19	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	37	U	37	19	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	37	U	37	8	1
10726	2-Chlorophenol	95-57-8	37	U	37	19	1
10726	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	19	1
10726	Chrysene	218-01-9	19	U	19	4	1
10726	Dibenz(a,h)anthracene	53-70-3	19	U	19	4	1
10726	Dibenzofuran	132-64-9	37	U	37	19	1
10726	1,2-Dichlorobenzene	95-50-1	37	U	37	19	1
10726	1,3-Dichlorobenzene	541-73-1	37	U	37	19	1
10726	1,4-Dichlorobenzene	106-46-7	37	U	37	19	1
10726	3,3'-Dichlorobenzidine	91-94-1	370	U	370	110	1
10726	2,4-Dichlorophenol	120-83-2	37	U	37	19	1
10726	2,6-Dichlorophenol	87-65-0	37	U	37	19	1
10726	Diethylphthalate	84-66-2	190	U	190	74	1
10726	2,4-Dimethylphenol	105-67-9	37	U	37	19	1
10726	3,5-Dimethylphenol	108-68-9	190	U	190	37	1
10726	Dimethylphthalate	131-11-3	190	U	190	74	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	560	U	560	190	1
10726	2,4-Dinitrophenol	51-28-5	730	U	730	330	1
10726	1,2-Diphenylhydrazine	122-66-7	37	U	37	19	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	74	1
10726	Fluoranthene	206-44-0	19	U	19	4	1
10726	Fluorene	86-73-7	19	U	19	4	1
10726	Hexachlorobenzene	118-74-1	19	U	19	4	1
10726	Hexachlorobutadiene	87-68-3	37	U	37	19	1
10726	Hexachlorocyclopentadiene	77-47-4	560	U	560	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachloroethane	67-72-1	190	U	190	37	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	4	1
10726	Isophorone	78-59-1	37	U	37	19	1
10726	1-Methylnaphthalene	90-12-0	19	U	19	4	1
10726	2-Methylnaphthalene	91-57-6	19	U	19	4	1
10726	2-Methylphenol	95-48-7	37	U	37	19	1
10726	4-Methylphenol	106-44-5	37	U	37	19	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	19	U	19	4	1
10726	NDPA as diphenylamine	n.a.	190	U	190	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	37	U	37	19	1
10726	3-Nitroaniline	99-09-2	190	U	190	74	1
10726	4-Nitroaniline	100-01-6	190	U	190	74	1
10726	Nitrobenzene	98-95-3	37	U	37	19	1
10726	2-Nitrophenol	88-75-5	37	U	37	19	1
10726	4-Nitrophenol	100-02-7	560	U	560	190	1
10726	N-Nitrosodimethylamine	62-75-9	190	U	190	74	1
10726	N-Nitroso-di-n-propylamine	621-64-7	37	U	37	19	1
10726	N-Nitrosodiphenylamine	86-30-6	37	U	37	19	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	190	U	190	74	1
10726	Pentachlorophenol	87-86-5	190	U	190	37	1
10726	Phenanthrene	85-01-8	19	U	19	4	1
10726	Phenol	108-95-2	37	U	37	19	1
10726	Pyrene	129-00-0	19	U	19	4	1
10726	Pyridine	110-86-1	190	U	190	74	1
10726	1,2,4-Trichlorobenzene	120-82-1	37	U	37	19	1
10726	2,4,5-Trichlorophenol	95-95-4	37	U	37	19	1
10726	2,4,6-Trichlorophenol	88-06-2	37	U	37	19	1
GC/MS Semivolatiles SW-846 8270D SIM			**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1	U	1	0.2	22.28
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.5	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.37	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.37	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.37	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.37	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.37	1
10590	Endrin	72-20-8	1.9	U	1.9	0.37	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.37	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.67	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.5	U	7.5	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	37	U	37	16	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and no target analytes were detected, the data is reported.						
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		42.8	7.72	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.792	1
06935	Arsenic	7440-38-2	13.2		4.28	0.750	1
06946	Barium	7440-39-3	70.3		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.793	J	1.07	0.0717	1
07914	Boron	7440-42-8	2.24	J	10.7	0.899	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0814	1
01650	Calcium	7440-70-2	2,100		21.4	3.58	1
06951	Chromium	7440-47-3	20.6		3.21	0.171	1
06952	Cobalt	7440-48-4	3.27		1.07	0.106	1
06953	Copper	7440-50-8	6.19		2.14	0.311	1
01654	Iron	7439-89-6	23,300		42.8	3.88	1
06955	Lead	7439-92-1	7.15		3.21	0.535	1
01656	Lithium	7439-93-2	15.3		4.3	0.36	1
01657	Magnesium	7439-95-4	3,810		10.7	1.79	1
06958	Manganese	7439-96-5	127		1.07	0.0889	1
06960	Molybdenum	7439-98-7	0.262	J	2.14	0.182	1
06961	Nickel	7440-02-0	9.87		2.14	0.139	1
10145	Phosphorus	7723-14-0	101		10.7	3.09	1
01662	Potassium	7440-09-7	1,490		107	8.93	1
01667	Sodium	7440-23-5	125		107	17.9	1
06969	Tin	7440-31-5	2.76	J	10.7	0.236	1
06970	Titanium	7440-32-6	865		1.07	0.182	1
06971	Vanadium	7440-62-2	42.6		1.07	0.139	1
06972	Zinc	7440-66-6	38.4		4.28	0.214	1
10146	Zirconium	7440-67-7	4.10	J	5.35	0.899	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.428	U	0.428	0.107	2
06142	Silver	7440-22-4	0.0425	J	0.214	0.0278	2
06144	Strontium	7440-24-6	19.9		0.428	0.0728	2
06145	Thallium	7440-28-0	0.251		0.214	0.0321	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 7471B**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0124 J	0.0176	0.0106	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.2 C.	n.a.	7.31	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.117 JBQ	1.11	0.0379	1
11031	12378-PeCDD	40321-76-4	0.194 JBQ	5.53	0.0355	1
11031	123478-HxCDD	39227-28-6	0.0704 JB	5.53	0.0236	1
11031	123678-HxCDD	57653-85-7	0.0868 JB	5.53	0.0257	1
11031	123789-HxCDD	19408-74-3	0.0673 JBQ	5.53	0.0231	1
11031	1234678-HpCDD	35822-46-9	0.0901 JBQ	5.53	0.0223	1
11031	OCDD	3268-87-9	0.326 JB	11.1	0.0314	1
11031	2378-TCDF	51207-31-9	0.0622 JQ	1.11	0.0351	1
11031	12378-PeCDF	57117-41-6	0.282 JB	5.53	0.0184	1
11031	23478-PeCDF	57117-31-4	0.251 JBQ	5.53	0.0202	1
11031	123478-HxCDF	70648-26-9	0.143 JBQ	5.53	0.0176	1
11031	123678-HxCDF	57117-44-9	0.117 JBQ	5.53	0.0136	1
11031	123789-HxCDF	72918-21-9	0.115 JBQ	5.53	0.0182	1
11031	234678-HxCDF	60851-34-5	0.0818 JB	5.53	0.0164	1
11031	1234678-HpCDF	67562-39-4	0.0689 JBQ	5.53	0.00802	1
11031	1234789-HpCDF	55673-89-7	0.0647 JBQ	5.53	0.0202	1
11031	OCDF	39001-02-0	0.267 JBQ	11.1	0.0440	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0324			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	91	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	116	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	40	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13325SLA026	11/25/2013 01:38	Holly Berry	1
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLE026	11/23/2013 07:51	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	13325SLA026	11/21/2013 19:30	Nicholas W Shroyer	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLE026	11/19/2013 18:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322A16A	11/20/2013 19:19	Laura M Krieger	22.28
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331733118	11/13/2013 23:42	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331733118	11/13/2013 23:43	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133220016A	11/21/2013 16:50	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240013A	11/21/2013 23:23	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240013A	11/20/2013 22:35	Karen L Beyer	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133220016A	11/18/2013 18:45	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230031A	11/21/2013 18:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230031A	11/20/2013 08:15	Joseph S Feister	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13324003	11/25/2013 04:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13324003	11/20/2013 10:50	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06944	Antimony	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
07914	Boron	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01650	Calcium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06952	Cobalt	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06953	Copper	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01654	Iron	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01656	Lithium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01657	Magnesium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06958	Manganese	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06960	Molybdenum	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06961	Nickel	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-549-SA5D-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5D

LL Sample # SW 7275674
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 11:05 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

54911 SDG#: PH127-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01662	Potassium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
01667	Sodium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06969	Tin	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06970	Titanium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
10146	Zirconium	SW-846 6010C	1	133250637003	11/22/2013 21:18	Katlin N Cataldi	1
06141	Selenium	SW-846 6020A	1	133250637003B	11/25/2013 15:12	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637003A	11/25/2013 15:12	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638001	11/23/2013 07:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637003	11/22/2013 05:43	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638001	11/22/2013 08:55	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13317039403A	11/13/2013 23:00	Daniel S Smith	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402A	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: TB1-111213 Water
SSFL Phase 3 Subarea 5D

LL Sample # WW 7275675
LL Group # 1433661
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/12/2013 08:00 by AV

Submitted: 11/13/2013 09:40
Reported: 12/09/2013 10:50

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

549TB SDG#: PH127-09TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 13:20	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 13:20	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322SLE026	Sample number(s): 7275662-7275665,7275670-7275674									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	108		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	104		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	105		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	102		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	109		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	94		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	102		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	106		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	110		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	111		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	103		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	105		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	108		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	105		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	118		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	103		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	102		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	96		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	112		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	99		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	102		79-112		
Batch number: 13322WAA026	Sample number(s): 7275661									
Acenaphthene	0.050	U	0.050	0.010	ug/l	105	104	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	108	106	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	107	106	78-123	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	109	104	73-127	5	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	93	72-120	11	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	105	79-136	7	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	95	85	70-130	11	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	106	87	64-130	20	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	105	97	73-131	8	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	100	96	40-138	4	30
Di-n-butylphthalate	0.057	J	1.0	0.050	ug/l	113	110	64-141	2	30
Chrysene	0.050	U	0.050	0.010	ug/l	105	103	76-125	3	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	104	93	58-131	12	30
Diethylphthalate	0.056	J	1.0	0.050	ug/l	111	108	64-128	3	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	106	102	23-139	4	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	0.096	J	1.0	0.050	ug/l	88	103	70-143	16	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	107	105	79-124	2	30
Fluorene	0.050	U	0.050	0.010	ug/l	104	104	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	106	92	62-130	13	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	109	108	80-126	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	108	106	81-124	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	107	106	75-120	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	79	82	36-120	4	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	81	93	57-145	14	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	104	103	75-120	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	107	107	71-130	1	30
Batch number: 13322WAB026	Sample number(s): 7275661									
Acenaphthene	0.5	U	0.5	0.1	ug/l	88	94	69-122	7	30
Acenaphthylene	0.5	U	0.5	0.1	ug/l	103	109	84-125	6	30
Aniline	1	U	1.	0.5	ug/l	73	77	44-101	5	30
Anthracene	0.5	U	0.5	0.1	ug/l	92	98	82-116	6	30
Benzidine	60	U	60.	20	ug/l	46	54	20-82	16	30
Benzo(a)anthracene	0.5	U	0.5	0.1	ug/l	89	92	84-121	3	30
Benzo(a)pyrene	0.5	U	0.5	0.1	ug/l	97	103	82-116	6	30
Benzo(b)fluoranthene	0.5	U	0.5	0.1	ug/l	94	101	82-121	7	30
Benzo(g,h,i)perylene	0.5	U	0.5	0.1	ug/l	90	94	81-121	4	30
Benzo(k)fluoranthene	0.5	U	0.5	0.1	ug/l	97	102	81-122	5	30
Benzoic acid	15	U	15.	6	ug/l	43	49	10-69	13	30
Benzyl alcohol	15	U	15.	5	ug/l	87	90	59-114	3	30
1,1'-Biphenyl	1	U	1.	0.5	ug/l	87	95	60-120	8	30
4-Bromophenyl-phenylether	1	U	1.	0.5	ug/l	85	91	75-115	7	30
Butylbenzylphthalate	5	U	5.	2	ug/l	89	91	70-122	3	30
Di-n-butylphthalate	5	U	5.	2	ug/l	88	95	72-120	8	30
Carbazole	1	U	1.	0.5	ug/l	89	97	70-128	9	30
4-Chloro-3-methylphenol	1	U	1.	0.5	ug/l	94	97	67-131	3	30
4-Chloroaniline	1	U	1.	0.5	ug/l	80	85	46-112	6	30
bis(2-Chloroethoxy)methane	1	U	1.	0.5	ug/l	88	92	65-125	4	30
bis(2-Chloroethyl)ether	1	U	1.	0.5	ug/l	89	93	73-112	5	30
bis(2-Chloroisopropyl)ether	1	U	1.	0.5	ug/l	91	93	67-115	2	30
2-Chloronaphthalene	1	U	1.	0.4	ug/l	91	97	60-138	6	30
2-Chlorophenol	1	U	1.	0.5	ug/l	89	92	76-111	4	30
4-Chlorophenyl-phenylether	1	U	1.	0.5	ug/l	87	94	77-114	7	30
Chrysene	0.5	U	0.5	0.1	ug/l	87	90	81-120	4	30
Dibenz(a,h)anthracene	0.5	U	0.5	0.1	ug/l	97	98	83-124	2	30
Dibenzofuran	1	U	1.	0.5	ug/l	90	95	81-110	6	30
1,2-Dichlorobenzene	1	U	1.	0.5	ug/l	87	89	69-107	2	30
1,3-Dichlorobenzene	1	U	1.	0.5	ug/l	83	87	57-115	5	30
1,4-Dichlorobenzene	1	U	1.	0.5	ug/l	86	89	61-109	3	30
3,3'-Dichlorobenzidine	5	U	5.	2	ug/l	59	65	47-108	11	30
2,4-Dichlorophenol	1	U	1.	0.5	ug/l	91	96	84-114	5	30
2,6-Dichlorophenol	1	U	1.	0.5	ug/l					
Diethylphthalate	5	U	5.	2	ug/l	85	92	60-121	8	30
2,4-Dimethylphenol	1	U	1.	0.5	ug/l	89	94	66-125	6	30
3,5-Dimethylphenol	10	U	10.	3	ug/l					
Dimethylphthalate	5	U	5.	2	ug/l	84	93	50-127	9	30
4,6-Dinitro-2-methylphenol	15	U	15.	5	ug/l	68	73	68-131	7	30
2,4-Dinitrophenol	30	U	30.	10	ug/l	59	62	43-137	5	30
1,2-Diphenylhydrazine	1	U	1.	0.5	ug/l	89	96	68-127	7	30
bis(2-Ethylhexyl)phthalate	5	U	5.	2	ug/l	86	89	78-117	4	30
Fluoranthene	0.5	U	0.5	0.1	ug/l	93	100	71-129	8	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluorene	0.5	U	0.5	0.1	ug/l	89	95	71-126	6	30
Hexachlorobenzene	0.5	U	0.5	0.1	ug/l	86	94	74-126	8	30
Hexachlorobutadiene	1	U	1.	0.5	ug/l	86	94	56-119	10	30
Hexachlorocyclopentadiene	15	U	15.	5	ug/l	79	91	21-126	14	30
Hexachloroethane	5	U	5.	1	ug/l	85	89	55-109	4	30
Indeno(1,2,3-cd)pyrene	0.5	U	0.5	0.1	ug/l	95	98	83-121	3	30
Isophorone	1	U	1.	0.5	ug/l	95	99	68-124	4	30
1-Methylnaphthalene	0.5	U	0.5	0.1	ug/l	96	100	83-116	4	30
2-Methylnaphthalene	0.5	U	0.5	0.1	ug/l	86	90	63-120	4	30
2-Methylphenol	1	U	1.	0.5	ug/l	90	91	61-118	1	30
4-Methylphenol	1	U	1.	0.5	ug/l	86	87	54-112	2	30
Naphthalene	0.5	U	0.5	0.1	ug/l	89	93	75-108	5	30
NDPA as diphenylamine	5	U	5.	2	ug/l	85	93	70-130	8	30
2-Nitroaniline	1	U	1.	0.5	ug/l	97	104	84-122	7	30
3-Nitroaniline	1	U	1.	0.5	ug/l	91	100	70-118	8	30
4-Nitroaniline	1	U	1.	0.5	ug/l	78	85	61-110	8	30
Nitrobenzene	1	U	1.	0.5	ug/l	91	96	67-123	4	30
2-Nitrophenol	1	U	1.	0.5	ug/l	88	95	84-118	7	30
4-Nitrophenol	30	U	30.	10	ug/l	54	58	16-91	6	30
N-Nitroso-di-n-propylamine	1	U	1.	0.5	ug/l	91	95	71-117	4	30
N-Nitrosodimethylamine	5	U	5.	2	ug/l	70	72	38-98	2	30
N-Nitrosodiphenylamine	1	U	1.	0.5	ug/l	86	94	80-115	9	30
Di-n-octylphthalate	5	U	5.	2	ug/l	99	104	72-129	5	30
Pentachlorophenol	5	U	5.	1	ug/l	82	87	50-129	6	30
Phenanthrene	0.5	U	0.5	0.1	ug/l	91	97	68-127	6	30
Phenol	1	U	1.	0.5	ug/l	57	58	23-82	2	30
Pyrene	0.5	U	0.5	0.1	ug/l	90	95	81-112	6	30
Pyridine	5	U	5.	2	ug/l	63	64	22-96	2	30
1,2,4-Trichlorobenzene	1	U	1.	0.5	ug/l	88	92	71-112	5	30
2,4,5-Trichlorophenol	1	U	1.	0.5	ug/l	95	103	81-121	8	30
2,4,6-Trichlorophenol	1	U	1.	0.5	ug/l	92	100	84-119	8	30
Batch number: 13325SLA026	Sample number(s): 7275662-7275665,7275670-7275674									
Acenaphthene	17	U	17.	3	ug/kg	99		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	110		83-127		
Aniline	330 U		330.	170	ug/kg	71		43-110		
Anthracene	17	U	17.	3	ug/kg	103		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	49		25-74		
Benzo(a)anthracene	17	U	17.	3	ug/kg	98		81-117		
Benzo(a)pyrene	17	U	17.	3	ug/kg	105		84-122		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	112		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	104		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	98		80-125		
Benzoic acid	500 U		500.	170	ug/kg	83		41-122		
Benzyl alcohol	330 U		330.	170	ug/kg	97		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	96		76-117		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	105		84-120		
Butylbenzylphthalate	170 U		170.	67	ug/kg	100		80-118		
Di-n-butylphthalate	170 U		170.	67	ug/kg	108		84-120		
Carbazole	33	U	33.	17	ug/kg	101		84-119		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	108		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	49		10-100		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	75		71-121		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	92		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	93		68-118		
2-Chloronaphthalene	33	U	33.	7	ug/kg	123		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	102		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	102		83-115		
Chrysene	17	U	17.	3	ug/kg	93		77-116		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	103		81-123		
Dibenzofuran	33	U	33.	17	ug/kg	101		85-115		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	94		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	94		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	96		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	39		10-119		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	109		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	100	98	77-113	2	30
Diethylphthalate	170 U		170.	67	ug/kg	106		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	109		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	108		70-130		
Dimethylphthalate	170 U		170.	67	ug/kg	106		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	92		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	81		24-136		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	109		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	101		75-124		
Fluoranthene	17	U	17.	3	ug/kg	102		79-123		
Fluorene	17	U	17.	3	ug/kg	101		86-118		
Hexachlorobenzene	17	U	17.	3	ug/kg	106		80-121		
Hexachlorobutadiene	33	U	33.	17	ug/kg	107		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	123		70-138		
Hexachloroethane	170 U		170.	33	ug/kg	100		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	105		77-122		
Isophorone	33	U	33.	17	ug/kg	105		77-119		
1-Methylnaphthalene	17	U	17.	3	ug/kg	108		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	96		80-114		
2-Methylphenol	33	U	33.	17	ug/kg	99		82-125		
4-Methylphenol	33	U	33.	17	ug/kg	92		73-124		
Naphthalene	17	U	17.	3	ug/kg	98		83-112		
NDPA as diphenylamine	170 U		170.	33	ug/kg	103		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	101		84-126		
3-Nitroaniline	170 U		170.	67	ug/kg	95		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	73		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	107		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	104		83-125		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Nitrophenol	500 U		500.	170	ug/kg	109		55-133		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	98		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	84		67-116		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	104		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	109		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	87		56-132		
Phenanthrene	17	U	17.	3	ug/kg	101		85-116		
Phenol	33	U	33.	17	ug/kg	90		76-124		
Pyrene	17	U	17.	3	ug/kg	97		81-114		
Pyridine	170 U		170.	67	ug/kg	74		45-113		
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	105		84-119		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	104		86-123		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	105		81-123		
Batch number: 13318B94A	Sample number(s): 7275661,7275675									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	110	75-135	1	30
Batch number: 13322A16A	Sample number(s): 7275663-7275665,7275670-7275671,7275673-7275674									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	78		67-119		
Batch number: 133200033A	Sample number(s): 7275661									
2,4-D	0.50	U	0.50	0.16	ug/l	102	145	68-155	35*	30
Dalapon	1.3	U	1.3	0.25	ug/l	52	85	25-119	48*	30
2,4-DB	1.0	U	1.0	0.30	ug/l	91	129	50-163	35*	30
Dicamba	0.30	U	0.30	0.080	ug/l	78	108	64-163	33*	30
Dinoseb	0.50	U	0.50	0.12	ug/l	168*	223*	16-163	28	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	106	146	89-162	31*	30
MCPA	200 U		200.	50	ug/l	71	104	68-154	39*	30
MCPP	200 U		200.	50	ug/l	79	142	46-173	57*	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	88	124	71-174	34*	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	88	121	58-155	32*	30
Batch number: 133220036A	Sample number(s): 7275662-7275665,7275670-7275671									
2,4-D	36	U	36.	12	ug/kg	111		59-122		
Dalapon	90	U	90.	44	ug/kg	76		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	111		54-131		
Dicamba	12	U	12.	4.0	ug/kg	95		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	32		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	130		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	91		56-133		
MCPP (Mecoprop)	2,500 U		2,500.	750	ug/kg	94		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	100		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	107		63-130		
Batch number: 133220007A	Sample number(s): 7275661									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	66	70	45-125	5	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	80	83	51-139	3	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beta BHC	0.0080 U	0.0080	0.0027	ug/l	80	82	57-127	3	30
Gamma BHC - Lindane	0.0080 U	0.0080	0.0016	ug/l	77	79	57-133	3	30
Chlordane	0.40 U	0.40	0.13	ug/l					
p,p-DDD	0.016 U	0.016	0.0040	ug/l	77	81	55-145	5	30
p,p-DDE	0.016 U	0.016	0.0040	ug/l	78	79	58-130	2	30
p,p-DDT	0.016 U	0.016	0.0042	ug/l	78	79	45-140	2	30
Delta BHC	0.0080 U	0.0080	0.0027	ug/l	79	82	52-133	4	30
Dieldrin	0.016 U	0.016	0.0042	ug/l	79	83	60-135	5	30
Endosulfan I	0.0080 U	0.0080	0.0034	ug/l	75	80	56-128	6	30
Endosulfan II	0.016 U	0.016	0.012	ug/l	78	83	53-123	6	30
Endosulfan Sulfate	0.016 U	0.016	0.0046	ug/l	78	79	51-130	1	30
Endrin	0.016 U	0.016	0.0065	ug/l	78	79	43-139	1	30
Endrin Aldehyde	0.080 U	0.080	0.016	ug/l	76	77	50-122	1	20
Endrin Ketone	0.016 U	0.016	0.0040	ug/l	75	80	51-133	6	30
Heptachlor	0.0080 U	0.0080	0.0016	ug/l	72	75	48-130	5	30
Heptachlor Epoxide	0.0080 U	0.0080	0.0018	ug/l	78	82	65-128	4	30
Methoxychlor	0.080 U	0.080	0.024	ug/l	84	86	40-150	3	30
Mirex	0.040 U	0.040	0.0080	ug/l					
Toxaphene	0.80 U	0.80	0.24	ug/l					
Batch number: 133220008A	Sample number(s): 7275661								
Aroclor 5432	0.40 U	0.40	0.080	ug/l					
Aroclor 5442	0.40 U	0.40	0.080	ug/l	74	73	35-84	1	30
Aroclor 5460	0.40 U	0.40	0.088	ug/l					
PCB-1016	0.40 U	0.40	0.080	ug/l	91	99	67-117	9	30
PCB-1221	0.40 U	0.40	0.080	ug/l					
PCB-1232	0.40 U	0.40	0.16	ug/l					
PCB-1242	0.40 U	0.40	0.080	ug/l					
PCB-1248	0.40 U	0.40	0.080	ug/l					
PCB-1254	0.40 U	0.40	0.080	ug/l					
PCB-1260	0.40 U	0.40	0.12	ug/l	85	104	67-128	21	30
PCB-1262	0.40 U	0.40	0.16	ug/l					
PCB-1268	0.40 U	0.40	0.13	ug/l					
Batch number: 133220016A	Sample number(s): 7275672-7275674								
Aldrin	0.83 U	0.83	0.17	ug/kg	102		60-118		
Alpha BHC	0.83 U	0.83	0.17	ug/kg	107		62-128		
Beta BHC	1.9 U	1.9	0.96	ug/kg	108		69-121		
Gamma BHC - Lindane	0.83 U	0.83	0.17	ug/kg	106		64-130		
Chlordane	17 U	17.	4.0	ug/kg					
p,p-DDD	1.7 U	1.7	0.33	ug/kg	117		69-141		
p,p-DDE	1.7 U	1.7	0.33	ug/kg	119		69-130		
p,p-DDT	1.7 U	1.7	0.35	ug/kg	116		64-139		
Delta BHC	0.83 U	0.83	0.45	ug/kg	111		51-141		
Dieldrin	1.7 U	1.7	0.33	ug/kg	114		73-135		
Endosulfan I	0.83 U	0.83	0.22	ug/kg	105		64-130		
Endosulfan II	1.7 U	1.7	0.33	ug/kg	109		68-128		
Endosulfan Sulfate	1.7 U	1.7	0.33	ug/kg	115		71-132		
Endrin	1.7 U	1.7	0.33	ug/kg	112		70-132		
Endrin Aldehyde	1.7 U	1.7	0.33	ug/kg	102		60-120		
Endrin Ketone	1.8 U	1.8	0.60	ug/kg	106		74-127		
Heptachlor	0.83 U	0.83	0.17	ug/kg	107		62-127		
Heptachlor Epoxide	0.83 U	0.83	0.17	ug/kg	111		69-125		
Methoxychlor	6.7 U	6.7	1.7	ug/kg	118		67-136		
Mirex	1.7 U	1.7	0.35	ug/kg					
Toxaphene	33 U	33.	14	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133240013A	Sample number(s): 7275662-7275665,7275670-7275674									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	82	81	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	102		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	107		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133220028A	Sample number(s): 7275661									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	76	84	70-130	10	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	84	90	70-130	8	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	82	89	70-130	8	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	45*	56*	70-130	23	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	55*	65*	70-130	16	30
Batch number: 133230031A	Sample number(s): 7275662-7275665,7275670-7275674									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	79		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	82		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	81		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	72		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	67		60-115		
Batch number: 133240635002	Sample number(s): 7275661									
Aluminum	0.400	U	0.400	0.0828	mg/l	103	103	90-112	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	106	106	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	99	90-111	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	100	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	101	101	90-112	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	101	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	102	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	103	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	103	102	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	103	103	88-110	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	102	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	100	101	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	102	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	103	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	102	101	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	100	99	90-110	1	20
Sodium	2.00	U	2.00	0.167	mg/l	101	101	87-114	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	101	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	103	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	101	100	90-110	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	104	104	90-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133240639002A	Sample number(s): 7275661								
Silver	0.0010 U	0.0010	0.00011	mg/l	100	103	90-115	3	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	102	100	90-110	2	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	104	104	90-115	0	20
Batch number: 133240639002B	Sample number(s): 7275661								
Selenium	0.0040 U	0.0040	0.00050	mg/l	98	108	90-120	9	20
Batch number: 133250637003	Sample number(s): 7275662-7275665,7275669-7275674								
Aluminum	19.2 J	40.0	7.21	mg/kg	101		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	105		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	103		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	105		80-120		
Calcium	22.5	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	106		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	108		80-120		
Iron	8.11 J	40.0	3.62	mg/kg	102		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	109		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	105		80-120		
Magnesium	19.6	10.0	1.67	mg/kg	101		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	106		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	107		80-120		
Potassium	100 U	100.	8.34	mg/kg	100		80-120		
Sodium	100 U	100.	16.7	mg/kg	100		80-120		
Tin	1.56 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	102		80-120		
Batch number: 133250637003A	Sample number(s): 7275662-7275665,7275669-7275674								
Silver	0.200 U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	105		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	105		80-120		
Batch number: 133250637003B	Sample number(s): 7275662-7275665,7275669-7275674								
Selenium	0.400 U	0.400	0.100	mg/kg	113		80-120		
Batch number: 133250638001	Sample number(s): 7275662-7275665,7275669-7275674								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	93		85-120		
Batch number: 133255713006	Sample number(s): 7275661								
3b Mercury 7470A	0.00020 U	0.00020	0.00006 0	mg/l	99	105	90-115	6	20
Batch number: 13317987301B	Sample number(s): 7275661								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	98	97	90-110	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322243201A	Sample number(s): 7275662-7275663,7275666-7275671									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	84		80-120		
Batch number: 13317039403A	Sample number(s): 7275662,7275670-7275674									
15a pH by 9045D						100		95-105		
Batch number: 13317039403B	Sample number(s): 7275663,7275669									
15a pH by 9045D						100		95-105		
Batch number: 13318002201A	Sample number(s): 7275661									
28b pH (9040B and 9040C)						99		93-106		
Batch number: 13323162402A	Sample number(s): 7275662-7275674									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13323002	Sample number(s): 7275661									
2378-TCDD	0.726	J	2.00	0.425	pg/l	112		60-150		
12378-PeCDD	0.830	J	10.0	0.398	pg/l	114		60-150		
123478-HxCDD	0.655	J	10.0	0.238	pg/l	115		60-150		
123678-HxCDD	0.743	J	10.0	0.253	pg/l	118		60-150		
123789-HxCDD	0.571	J	10.0	0.242	pg/l	118		60-150		
1234678-HpCDD	0.616	J	10.0	0.319	pg/l	116		60-150		
OCDD	2.62	J	20.0	0.301	pg/l	117		60-150		
2378-TCDF	2.00	U	2.00	0.302	pg/l	116		60-150		
12378-PeCDF	1.16	J	10.0	0.217	pg/l	120		60-150		
23478-PeCDF	0.618	J	10.0	0.194	pg/l	123		60-150		
123478-HxCDF	0.912	J	10.0	0.187	pg/l	123		60-150		
123678-HxCDF	1.05	J	10.0	0.185	pg/l	125		60-150		
123789-HxCDF	1.12	J	10.0	0.203	pg/l	125		60-150		
234678-HxCDF	1.11	J	10.0	0.182	pg/l	127		60-150		
1234678-HpCDF	0.958	J	10.0	0.0969	pg/l	122		60-150		
1234789-HpCDF	0.986	J	10.0	0.115	pg/l	122		60-150		
OCDF	2.54	J	20.0	0.404	pg/l	122		60-150		
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674									
2378-TCDD	0.0670	J	1.00	0.0645	ng/kg	102		67-158		
12378-PeCDD	0.0804	J	5.00	0.0510	ng/kg	111		70-142		
123478-HxCDD	0.0412	J	5.00	0.0313	ng/kg	110		70-164		
123678-HxCDD	0.0407	J	5.00	0.0321	ng/kg	112		76-134		
123789-HxCDD	0.0742	J	5.00	0.0312	ng/kg	115		64-162		
1234678-HpCDD	0.0721	J	5.00	0.0334	ng/kg	108		70-140		
OCDD	0.213	J	10.0	0.0371	ng/kg	105		78-144		
2378-TCDF	1.00	U	1.00	0.0673	ng/kg	108		75-158		
12378-PeCDF	0.121	J	5.00	0.0308	ng/kg	110		80-134		
23478-PeCDF	0.0714	J	5.00	0.0325	ng/kg	110		68-160		
123478-HxCDF	0.0890	J	5.00	0.0249	ng/kg	109		72-134		
123678-HxCDF	0.0519	J	5.00	0.0221	ng/kg	112		84-130		
123789-HxCDF	0.0575	J	5.00	0.0283	ng/kg	109		78-130		
234678-HxCDF	0.0893	J	5.00	0.0237	ng/kg	112		70-156		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDF	0.0746 J	5.00	0.0134	ng/kg	108		82-122		
1234789-HpCDF	0.0711 J	5.00	0.0221	ng/kg	110		78-138		
OCDF	0.233 J	10.0	0.0460	ng/kg	111		63-170		
Batch number: 13323002	Sample number(s): 7275661								
TEQ WHO 2005 - EDLx0.0	0.278			pg/l					
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674								
TEQ WHO 2005 - EDLx0.0	0.00970			ng/kg					

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13322SLE026	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
Acenaphthene	104	102	48-127	2	30				
Acenaphthylene	103	101	49-121	2	30				
Anthracene	102	100	52-126	2	30				
Benzo(a)anthracene	102	102	44-143	0	30				
Benzo(a)pyrene	100	98	44-140	2	30				
Benzo(b)fluoranthene	105	102	26-142	3	30				
Benzo(e)pyrene	92	89	70-130	3	30				
Benzo(g,h,i)perylene	89	86	33-141	3	30				
Benzo(k)fluoranthene	105	104	54-142	1	30				
Butylbenzylphthalate	116	119	49-151	2	30				
Di-n-butylphthalate	117	118	52-147	1	30				
Chrysene	100	98	29-148	3	30				
Dibenz(a,h)anthracene	97	94	20-137	3	30				
Diethylphthalate	111	106	43-145	5	30				
Dimethylphthalate	104	101	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	123	124	39-167	1	30				
Fluoranthene	101	100	40-148	1	30				
Fluorene	101	98	51-137	3	30				
Indeno(1,2,3-cd)pyrene	94	92	17-136	3	30				
1-Methylnaphthalene	102	99	50-131	3	30				
2-Methylnaphthalene	100	97	35-152	2	30				
Naphthalene	99	96	31-148	3	30				
N-Nitrosodimethylamine	94	91	48-113	3	30				
Di-n-octylphthalate	116	114	52-162	2	30				
Phenanthrene	97	97	29-142	0	30				
Pyrene	99	98	26-143	0	30				
Batch number: 13325SLA026	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
Acenaphthene	96	98	61-128	2	30				
Acenaphthylene	107	109	67-130	2	30				
Aniline	61	70	10-131	14	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Anthracene	98	102	41-142	5	30				
Benzidine	45	45	35-141	2	30				
Benzo(a)anthracene	97	94	32-150	3	30				
Benzo(a)pyrene	103	103	36-151	0	30				
Benzo(b)fluoranthene	105	113	29-150	7	30				
Benzo(g,h,i)perylene	104	100	41-147	4	30				
Benzo(k)fluoranthene	101	97	44-145	4	30				
Benzoic acid	53	60	23-170	13	30				
Benzyl alcohol	93	96	32-145	3	30				
1,1'-Biphenyl	92	95	64-120	3	30				
4-Bromophenyl-phenylether	101	105	66-122	4	30				
Butylbenzylphthalate	103	101	67-126	2	30				
Di-n-butylphthalate	102	105	70-124	3	30				
Carbazole	98	100	63-126	2	30				
4-Chloro-3-methylphenol	103	111	61-131	7	30				
4-Chloroaniline	53	64	11-114	19	30				
bis(2-Chloroethoxy)methane	72	74	58-122	2	30				
bis(2-Chloroethyl)ether	82	91	66-122	10	30				
bis(2-Chloroisopropyl)ether	82	90	50-115	10	30				
2-Chloronaphthalene	124	127	50-140	3	30				
2-Chlorophenol	93	105	71-130	12	30				
4-Chlorophenyl-phenylether	104	107	65-117	3	30				
Chrysene	94	92	28-146	3	30				
Dibenz(a,h)anthracene	103	99	54-142	4	30				
Dibenzofuran	98	102	65-124	4	30				
1,2-Dichlorobenzene	87	97	72-114	11	30				
1,3-Dichlorobenzene	86	94	67-118	10	30				
1,4-Dichlorobenzene	88	95	68-119	9	30				
3,3'-Dichlorobenzidine	50	33	10-143	43*	30				
2,4-Dichlorophenol	106	111	54-135	5	30				
Diethylphthalate	103	107	66-120	4	30				
2,4-Dimethylphenol	106	109	62-132	3	30				
3,5-Dimethylphenol	99	107	70-130	8	30				
Dimethylphthalate	101	105	69-119	4	30				
4,6-Dinitro-2-methylphenol	87	86	10-148	1	30				
2,4-Dinitrophenol	75	69	20-143	8	30				
1,2-Diphenylhydrazine	103	106	51-145	2	30				
bis(2-Ethylhexyl)phthalate	100	102	60-134	2	30				
Fluoranthene	98	101	30-151	3	30				
Fluorene	98	102	55-128	4	30				
Hexachlorobenzene	103	104	46-132	1	30				
Hexachlorobutadiene	105	107	65-125	2	30				
Hexachlorocyclopentadiene	120	118	10-153	1	30				
Hexachloroethane	90	98	24-138	9	30				
Indeno(1,2,3-cd)pyrene	105	101	44-147	3	30				
Isophorone	102	104	68-119	1	30				
1-Methylnaphthalene	103	109	82-115	5	30				
2-Methylnaphthalene	94	98	39-140	4	30				
2-Methylphenol	88	98	62-133	11	30				
4-Methylphenol	80	92	59-132	14	30				
Naphthalene	96	97	44-142	1	30				
NDPA as diphenylamine	99	102	70-130	4	30				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Nitroaniline	97	102	64-131	5	30				
3-Nitroaniline	95	103	31-145	8	30				
4-Nitroaniline	68	72	30-131	6	30				
Nitrobenzene	103	108	63-125	5	30				
2-Nitrophenol	100	102	45-146	2	30				
4-Nitrophenol	100	109	25-142	8	30				
N-Nitroso-di-n-propylamine	86	97	58-126	13	30				
N-Nitrosodimethylamine	72	85	52-117	16	30				
N-Nitrosodiphenylamine	99	103	59-135	4	30				
Di-n-octylphthalate	107	111	48-155	4	30				
Pentachlorophenol	77	77	23-145	0	30				
Phenanthrene	96	97	34-147	1	30				
Phenol	83	94	61-130	12	30				
Pyrene	97	97	29-148	1	30				
Pyridine	60	67	16-108	11	30				
1,2,4-Trichlorobenzene	103	104	66-116	1	30				
2,4,5-Trichlorophenol	99	100	64-131	1	30				
2,4,6-Trichlorophenol	98	106	60-136	8	30				
Batch number: 13322A16A	Sample number(s): 7275663-7275665,7275670-7275671,7275673-7275674 UNSPK: 7275663								
11a TPH by EPA 8015B GRO	75	72	69-123	6	30				
Batch number: 133220036A	Sample number(s): 7275662-7275665,7275670-7275671 UNSPK: 7275663								
2,4-D	119	115	42-143	3	35				
Dalapon	76	74	16-98	3	50				
2,4-DB	115	114	10-179	1	50				
Dicamba	94	90	55-133	5	50				
Dinoseb	27	25	10-52	5	35				
2,4-DP (Dichlorprop)	132	130	32-171	2	50				
MCPA	96	93	23-169	4	50				
MCPP (Mecoprop)	97	92	24-164	5	50				
2,4,5-T	108	109	12-172	1	35				
2,4,5-TP	108	107	10-142	1	35				
Batch number: 133220016A	Sample number(s): 7275672-7275674 UNSPK: 7275672								
Aldrin	98	98	16-126	0	50				
Alpha BHC	99	97	14-140	2	50				
Beta BHC	104	105	42-133	0	50				
Gamma BHC - Lindane	98	95	30-137	4	50				
p,p-DDD	112	111	43-149	0	50				
p,p-DDE	109	111	35-152	1	50				
p,p-DDT	107	107	12-193	0	50				
Delta BHC	106	105	13-153	1	50				
Dieldrin	106	104	41-153	2	50				
Endosulfan I	98	97	26-146	1	50				
Endosulfan II	103	104	34-141	1	50				
Endosulfan Sulfate	108	110	10-181	1	50				
Endrin	105	104	30-152	1	50				
Endrin Aldehyde	94	97	23-138	3	50				
Endrin Ketone	99	100	30-148	1	50				
Heptachlor	99	97	16-152	1	50				
Heptachlor Epoxide	104	103	33-144	1	50				

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Methoxychlor	113	115	41-161	2	50				
Batch number: 133240013A	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
PCB-1016	93	93	41-135	0	50				
PCB-1260	96	95	40-134	0	50				
Batch number: 133230031A	Sample number(s): 7275662-7275665,7275670-7275674 UNSPK: 7275663								
EFH (C12-C14)	84	80	49-123	4	20				
EFH (C15-C20)	88	83	49-123	5	20				
EFH (C21-C30)	87	83	49-123	5	20				
EFH (C30-C40)	71	77	49-123	9	20				
EFH (C8-C11)	70	68	49-123	2	20				
Batch number: 133250637003	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Aluminum	-117 (2)	2431 (2)	75-125	30*	20	14,000	14,000	0	20
Antimony	62*	48*	75-125	30*	20	3.88 U	3.92 U	0 (1)	20
Arsenic	92	129*	75-125	22*	20	5.47	4.98	9 (1)	20
Barium	103	114	75-125	5	20	59.7	59.6	0	20
Beryllium	101	109	75-125	3	20	0.648 J	0.621 J	4 (1)	20
Boron	98	99	75-125	4	20	1.84 J	1.73 J	6 (1)	20
Cadmium	97	93	75-125	8	20	0.971 U	0.980 U	0 (1)	20
Calcium	131 (2)	792 (2)	75-125	63*	20	2,200	2,160	2	20
Chromium	88	144*	75-125	26*	20	15.8	15.8	0	20
Cobalt	98	99	75-125	3	20	3.08	3.18	3 (1)	20
Copper	93	127*	75-125	23*	20	5.76	5.61	3 (1)	20
Iron	-1719 (2)	9674 (2)	75-125	45*	20	20,600	20,200	2	20
Lead	88	127*	75-125	24*	20	6.13	5.79	6 (1)	20
Lithium	101	106	75-125	1	20	12.3	12.4	1 (1)	20
Magnesium	196 (2)	1134 (2)	75-125	38*	20	3,410	3,400	0	20
Manganese	124	192*	75-125	14	20	143	149	4	20
Molybdenum	95	93	75-125	6	20	0.252 J	1.96 U	200* (1)	20
Nickel	97	107	75-125	5	20	7.87	7.93	1 (1)	20
Phosphorus	260*	137*	75-125	39*	20	130	131	1	20
Potassium	161*	191*	75-125	6	20	2,040	2,140	5	20
Sodium	96	104	75-125	3	20	128	130	2 (1)	20
Tin	90	87	75-125	7	20	2.87 J	2.91 J	1 (1)	20
Titanium	260 (2)	444 (2)	75-125	13	20	958	990	3	20
Vanadium	96	132*	75-125	18	20	32.1	31.5	2	20
Zinc	109	147*	75-125	15	20	44.2	43.3	2	20
Zirconium	98	99	75-125	3	20	3.98 J	4.44 J	11 (1)	20
Batch number: 133250637003A	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Silver	111	103	75-125	11	20	0.194 U	0.196 U	0 (1)	20
Strontium	115	236*	75-125	34*	20	12.8	13.8	8	20
Thallium	107	141*	75-125	16	20	0.217	0.236	8 (1)	20
Batch number: 133250637003B	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
Selenium	114	115	75-125	2	20	0.388 U	0.392 U	0 (1)	20

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 133250638001	Sample number(s): 7275662-7275665,7275669-7275674 UNSPK: 7275663 BKG: 7275663								
3a Mercury 7471A	107	106	65-135	4	20	0.0163 U	0.0162 U	0 (1)	20
Batch number: 13322243201A	Sample number(s): 7275662-7275663,7275666-7275671 UNSPK: 7275663 BKG: 7275663								
2a Chromium VI by EPA 7199	98		75-125			0.32 J	0.31 J	1 (1)	20
Batch number: 13317039403A	Sample number(s): 7275662,7275670-7275674 BKG: P275655								
15a pH by 9045D						8.25	8.22	0	3
Batch number: 13317039403B	Sample number(s): 7275663,7275669 BKG: 7275663								
15a pH by 9045D						7.40	7.46	1	3
Batch number: 13318002201A	Sample number(s): 7275661 BKG: P272295								
28b pH (9040B and 9040C)						8.1	8.1	1	3
Batch number: 13323162402A	Sample number(s): 7275662-7275674 BKG: 7275663								
14a Moisture Content by 160.3						3.1	3.1	2	20
14a Moisture Content by 160.3						3.1	3.1	2	20
14a Moisture Content by 160.3						3.1	3.1	2	20
Batch number: 13324003	Sample number(s): 7275662,7275672-7275674 UNSPK: P275655								
2378-TCDD	101	98	40-135	1	20				
12378-PeCDD	109	111	40-135	6	20				
123478-HxCDD	109	111	40-135	5	20				
123678-HxCDD	109	112	40-135	6	20				
123789-HxCDD	107	110	40-135	7	20				
1234678-HpCDD	89	121	40-135	28*	20				
OCDD	10*	166*	40-135	81*	20				
2378-TCDF	108	106	40-135	2	20				
12378-PeCDF	108	112	40-135	7	20				
23478-PeCDF	109	110	40-135	4	20				
123478-HxCDF	109	113	40-135	7	20				
123678-HxCDF	110	110	40-135	4	20				
123789-HxCDF	109	112	40-135	6	20				
234678-HxCDF	109	112	40-135	6	20				
1234678-HpCDF	106	112	40-135	8	20				
1234789-HpCDF	111	111	40-135	3	20				
OCDF	106	113	40-135	9	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13322SLE026

Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

7275662	75	76	84
7275663	85	87	92
7275664	88	89	99
7275665	86	87	95
7275670	82	82	92
7275671	80	80	90
7275672	77	74	86
7275673	86	86	96
7275674	80	81	89
Blank	83	82	90
LCS	90	92	101
MS	88	89	99
MSD	86	87	95
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13322WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7275661	97	94	93
Blank	99	97	93
LCS	106	106	103
LCSD	103	94	101
Limits:	44-137	62-141	51-136

Analysis Name: 8b SVOCs by EPA 8270D
Batch number: 13322WAB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7275661	47	67	90	86	82	81
Blank	49	68	85	79	79	80
LCS	52	70	87	87	89	83
LCSD	53	72	95	92	96	89
Limits:	20-110	20-110	30-110	40-130	45-130	45-130

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13325SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7275662	85	92	97	98	98	110
7275663	86	93	107	96	94	109
7275664	82	89	97	97	95	106
7275665	89	96	105	100	98	107
7275670	89	96	113	96	101	110
7275671	87	94	103	98	97	110
7275672	89	96	99	98	96	106
7275673	87	92	103	98	98	108
7275674	93	100	104	97	98	110
Blank	87	97	112	104	102	114
LCS	93	98	104	102	100	107
LCSD	93	99	111			
MS	82	89	97	97	95	106

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

MSD	89	96	105	100	98	107
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13318B94A

	Trifluorotoluene-F
7275661	87
7275675	88
Blank	84
LCS	94
LCSD	93
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13322A16A

	Trifluorotoluene-F
7275663	85
7275664	96
7275665	89
7275670	69
7275671	86
7275673	83
7275674	92
Blank	103
LCS	94
MS	96
MSD	89
Limits:	50-142

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 133200033A

	2,4-Dichlorophenylacetic acid
7275661	85
Blank	74
LCS	72
LCSD	97
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 133220007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275661	96	84
Blank	107	112
LCS	79	87
LCSD	82	90
Limits:	60-140	20-120

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133220008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275661	97	71
Blank	86	88
LCS	98	29*
LCSD	109	79
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133220016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275672	95	114
7275673	98	106
7275674	95	113
Blank	93	106
LCS	102	120
MS	94	109
MSD	95	110
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 133220036A

	2,4-Dichlorophenylacetic acid
7275662	79
7275663	73
7275664	86
7275665	85
7275670	72
7275671	82
Blank	64
LCS	86
MS	86
MSD	85
Limits:	50-150

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133240013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7275662	109	108
7275663	117	113
7275664	103	107
7275665	102	104
7275670	110	104
7275671	107	99
7275672	76	73
7275673	110	111

*- Outside of specification
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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

7275674	103	98
Blank	106	113
LCS	107	109
LCSD	113	120
MS	103	107
MSD	102	104
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133220028A

	Chlorobenzene	Orthoterphenyl
7275661	118	88
Blank	93	82
LCS	89	82
LCSD	95	89
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133230031A

	Chlorobenzene	Orthoterphenyl
7275662	90	87
7275663	83	81
7275664	89	88
7275665	86	83
7275670	90	88
7275671	90	88
7275672	88	84
7275673	88	75
7275674	153*	79
Blank	84	82
LCS	84	82
MS	89	88
MSD	86	83
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13323002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7275661	71	72	93	93	89	87
Blank	88	85	112	112	110	109
OPR	63	70	94	94	91	90
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7275661	83	77	77	65	83	81
Blank	100	94	91	77	100	98
OPR	86	86	84	62	82	81

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433661
Reported: 12/09/13 at 10:50 AM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7275661	80	71	66	78	72	
Blank	97	88	80	95	84	
OPR	81	77	73	74	70	
Limits:	28-130	23-140	17-157	24-169	24-185	

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13324003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7275662	75	70	74	93	82	65
7275672	52	59	66	81	72	56
7275673	68	63	71	88	76	61
7275674	72	72	75	91	80	77
Blank	71	74	80	90	88	81
MS	66	72	81	88	85	82
MSD	84	81	87	92	91	97
OPR	59	67	77	82	80	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7275662	124	46	34	70	87	86
7275672	115	45	34	57	74	75
7275673	117	45	34	64	75	77
7275674	116	52	40	72	82	81
Blank	107	70	69	77	90	90
MS	96	68	68	69	85	84
MSD	95	84	86	72	87	88
OPR	98	73	71	65	83	82
Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7275662	84	76	72	69	83	
7275672	73	71	69	53	70	
7275673	74	68	63	65	78	
7275674	80	70	65	66	85	
Blank	88	84	81	69	83	
MS	84	75	74	67	77	
MSD	85	82	85	82	83	
OPR	77	80	80	58	70	
Limits:	28-130	23-140	17-157	24-169	24-185	

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(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#14336661 Sample#72756061-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/12/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131112-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB1-111213	11/12/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																								
EB1-111213	11/12/13 15:00	WQ	None	2 - 1 L Amber	10 day									X																						
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day										X																					
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Poly	10 day														X																	
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Poly	10 day															X																
EB1-111213	11/12/13 15:00	WQ	None	2 - 1 L Amber	10 day																X															
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day																	X														
EB1-111213	11/12/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
EB1-111213	11/12/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X										
EB1-111213	11/12/13 15:00	WQ	None	1 - 250 mL Amber	10 day					X																										

Special Instructions:

Sampler: Pam

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.12.13	1600									
									11/13/13	0940	

acct#13013 Gp#14336661 Sample#72756661-75

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/12/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131112-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-560-SA5D-SB-0.0-0.5	11/12/13 08:35	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X						X					X										
SL-560-SA5D-SB-4.0-5.0MS	11/12/13 09:20	SO	None	6 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-560-SA5D-SB-7.0-8.0	11/12/13 09:35	SO	None	2 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-860-SA5D-SB-4.0-5.0	11/12/13 09:05	SO	None	2 - 16 oz glass	10 day	X	X			X		X			X			X		X	X					X										
SL-560-SA5D-SB-4.0-5.0MS	11/12/13 09:20	SO	None	6 - Encore	10 day																				X											
SL-560-SA5D-SB-0.0-0.5	11/12/13 08:35	SO	None	2 - 4 oz glass	10 day													X		X																
SL-860-SA5D-SB-4.0-5.0	11/12/13 09:05	SO	None	2 - Encore	10 day																				X											
SL-560-SA5D-SB-7.0-8.0	11/12/13 09:35	SO	None	2 - Encore	10 day																				X											
SL-549-SA5D-SB-0.0-0.5	11/12/13 10:25	SO	None	2 - SS-Sleeve	10 day	X	X			X		X		X	X							X				X										
SL-549-SA5D-SB-0.0-0.5	11/12/13 10:25	SO	None	1 - 4 oz glass	10 day													X																		
SL-549-SA5D-SB-4.0-5.0	11/12/13 10:40	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X			X				X				X										
SL-549-SA5D-SB-4.0-5.0	11/12/13 10:40	SO	None	2 - Encore	10 day																				X											
SL-549-SA5D-SB-11.0-12.0	11/12/13 11:05	SO	None	2 - 16 oz glass	10 day	X	X			X		X		X	X			X				X				X										
SL-549-SA5D-SB-11.0-12.0	11/12/13 11:05	SO	None	2 - Encore	10 day																				X											
TB1-111213	11/12/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											

Special Instructions:

Sampler: Andy Vivian

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.12.13	1600									
										11/13/13	0940

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C# 14336061

Environmental Sample Administration Receipt Documentation Log

Client/Project: CDM Smith

Date of Receipt: 11/13/13

Time of Receipt: 0940

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.4	TB	WI	Y	B	
2	↓	0.4	↓	↓	↓	↓	
3	↓	0.4	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/13/13 1044

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 03, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/14/2013
Group Number: 1433971
SDG: PH128
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-654-SA5A-SB-0.0-0.5 Soil	7276995
SL-654-SA5A-SB-3.0-4.0 Soil	7276996
SL-654-SA5A-SB-3.0-4.0MS Soil	7276997
SL-654-SA5A-SB-3.0-4.0MSD Soil	7276998
SL-654-SA5A-SB-3.0-4.0DUP Soil	7276999
SL-954-SA5A-SB-3.0-4.0 Soil	7277000
SL-657-SA5A-SB-7.0-8.0 Soil	7277001
SL-658-SA5A-SB-0.0-0.5 Soil	7277002
SL-657-SA5A-SB-0.0-0.5 Soil	7277003
SL-658-SA5A-SB-7.0-8.0 Soil	7277004
SL-657-SA5A-SB-4.0-5.0 Soil	7277005
SL-658-SA5A-SB-4.0-5.0 Soil	7277006
SL-667-SA5A-SB-0.0-0.5 Soil	7277007
SL-667-SA5A-SB-3.0-4.0 Soil	7277008
SL-670-SA5A-SB-0.0-0.5 Soil	7277009
TB-111313 Water	7277010

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2801 SDG#: PH128-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.5	J	1.7	0.34	1
12969	Anthracene	120-12-7	4.9		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	48		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	98		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	150		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	87		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	80		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	52		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	81		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	20		1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	39		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	90		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	0.75	J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.3	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.3	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	10		1.7	0.68	1
12969	Pyrene	129-00-0	33		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	20		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	43		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2801 SDG#: PH128-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,100		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	5.09		4.00	0.700	1
06946	Barium	7440-39-3	94.6		0.999	0.0330	1
06947	Beryllium	7440-41-7	0.581	J	0.999	0.0670	1
07914	Boron	7440-42-8	2.86	J	9.99	0.839	1
06949	Cadmium	7440-43-9	0.127	J	0.999	0.0760	1
01650	Calcium	7440-70-2	3,140		20.0	3.34	1
06951	Chromium	7440-47-3	22.3		3.00	0.160	1
06952	Cobalt	7440-48-4	5.70		0.999	0.0989	1
06953	Copper	7440-50-8	12.2		2.00	0.290	1
01654	Iron	7439-89-6	22,800		40.0	3.62	1
06955	Lead	7439-92-1	9.53		3.00	0.500	1
01656	Lithium	7439-93-2	25.1		4.0	0.34	1
01657	Magnesium	7439-95-4	4,840		9.99	1.67	1
06958	Manganese	7439-96-5	317		0.999	0.0829	1
06960	Molybdenum	7439-98-7	0.419	J	2.00	0.170	1
06961	Nickel	7440-02-0	14.1		2.00	0.130	1
10145	Phosphorus	7723-14-0	426		9.99	2.89	1
01662	Potassium	7440-09-7	3,090		99.9	8.33	1
01667	Sodium	7440-23-5	88.5	J	99.9	16.7	1
06969	Tin	7440-31-5	2.88	J	9.99	0.220	1
06970	Titanium	7440-32-6	1,190		0.999	0.170	1
06971	Vanadium	7440-62-2	39.2		0.999	0.130	1
06972	Zinc	7440-66-6	62.0		4.00	0.200	1
10146	Zirconium	7440-67-7	3.88	J	5.00	0.839	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.135	J	0.400	0.0999	2
06142	Silver	7440-22-4	0.156	J	0.200	0.0260	2
06144	Strontium	7440-24-6	18.8		0.400	0.0680	2
06145	Thallium	7440-28-0	0.284		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0278		0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.50		0.0100	0.0100	1
	The pH was measured in water at 17.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2801 SDG#: PH128-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0396	JQ	0.988	0.0349	1
11031	12378-PeCDD	40321-76-4	0.114	JBQ	4.94	0.0400	1
11031	123478-HxCDD	39227-28-6	0.120	JQ	4.94	0.0405	1
11031	123678-HxCDD	57653-85-7	0.739	J	4.94	0.0410	1
11031	123789-HxCDD	19408-74-3	0.569	JB	4.94	0.0388	1
11031	1234678-HpCDD	35822-46-9	13.0	B	4.94	0.0401	1
11031	OCDD	3268-87-9	159	B	9.88	0.0451	1
11031	2378-TCDF	51207-31-9	0.119	JQ	0.988	0.0516	1
11031	12378-PeCDF	57117-41-6	0.584	JB	4.94	0.0235	1
11031	23478-PeCDF	57117-31-4	0.241	JB	4.94	0.0235	1
11031	123478-HxCDF	70648-26-9	0.229	JB	4.94	0.0301	1
11031	123678-HxCDF	57117-44-9	0.207	JB	4.94	0.0270	1
11031	123789-HxCDF	72918-21-9	0.314	JBQ	4.94	0.0319	1
11031	234678-HxCDF	60851-34-5	0.185	JB	4.94	0.0287	1
11031	1234678-HpCDF	67562-39-4	2.54	JB	4.94	0.0417	1
11031	1234789-HpCDF	55673-89-7	0.264	JBQ	4.94	0.0557	1
11031	OCDF	39001-02-0	6.63	JB	9.88	0.0360	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.489				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2801 SDG#: PH128-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
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Fairfax VA 22030

P2801 SDG#: PH128-01

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 10:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 14:36	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 16:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 14:59	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:42	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:43	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:43	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:43	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:43	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276995
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:05

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2801 SDG#: PH128-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.42	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	4.1		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	6.2		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	11		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	7.1	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	4.5		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	3.6		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	6.1		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.5	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	4.4		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	5.4		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.6	J	1.7	0.68	1
12969	Pyrene	129-00-0	3.9		1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.65
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,900		41.4	7.46	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	6.45		4.14	0.724	1
06946	Barium	7440-39-3	98.3		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.687	J	1.03	0.0693	1
07914	Boron	7440-42-8	2.32	J	10.3	0.869	1
06949	Cadmium	7440-43-9	0.0962	J	1.03	0.0786	1
01650	Calcium	7440-70-2	3,220		20.7	3.45	1
06951	Chromium	7440-47-3	23.2		3.10	0.165	1
06952	Cobalt	7440-48-4	6.30		1.03	0.102	1
06953	Copper	7440-50-8	11.4		2.07	0.300	1
01654	Iron	7439-89-6	26,800		41.4	3.74	1
06955	Lead	7439-92-1	7.63		3.10	0.517	1
01656	Lithium	7439-93-2	30.3		4.1	0.35	1
01657	Magnesium	7439-95-4	5,770		10.3	1.73	1
06958	Manganese	7439-96-5	337		1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.442	J	2.07	0.176	1
06961	Nickel	7440-02-0	14.4		2.07	0.134	1
10145	Phosphorus	7723-14-0	448		10.3	2.99	1
01662	Potassium	7440-09-7	2,880		103	8.62	1
01667	Sodium	7440-23-5	98.7	J	103	17.3	1
06969	Tin	7440-31-5	3.18	J	10.3	0.228	1
06970	Titanium	7440-32-6	1,390		1.03	0.176	1
06971	Vanadium	7440-62-2	46.8		1.03	0.134	1
06972	Zinc	7440-66-6	60.7		4.14	0.207	1
10146	Zirconium	7440-67-7	4.64	J	5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.194	J	0.414	0.103	2
06142	Silver	7440-22-4	0.0393	J	0.207	0.0269	2
06144	Strontium	7440-24-6	20.4		0.414	0.0703	2
06145	Thallium	7440-28-0	0.300		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.18		0.0100	0.0100	1
	The pH was measured in water at 19.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.985	U	0.985	0.0512	1
11031	12378-PeCDD	40321-76-4	0.134	JBQ	4.92	0.0418	1
11031	123478-HxCDD	39227-28-6	0.145	J	4.92	0.0477	1
11031	123678-HxCDD	57653-85-7	0.404	JQ	4.92	0.0503	1
11031	123789-HxCDD	19408-74-3	0.440	JB	4.92	0.0471	1
11031	1234678-HpCDD	35822-46-9	7.49	B	4.92	0.0436	1
11031	OCDD	3268-87-9	76.1	B	9.85	0.0457	1
11031	2378-TCDF	51207-31-9	0.0817	JQ	0.985	0.0562	1
11031	12378-PeCDF	57117-41-6	0.520	JB	4.92	0.0290	1
11031	23478-PeCDF	57117-31-4	0.266	JBQ	4.92	0.0286	1
11031	123478-HxCDF	70648-26-9	0.199	JBQ	4.92	0.0359	1
11031	123678-HxCDF	57117-44-9	0.215	JBQ	4.92	0.0307	1
11031	123789-HxCDF	72918-21-9	0.258	JB	4.92	0.0366	1
11031	234678-HxCDF	60851-34-5	0.156	JBQ	4.92	0.0317	1
11031	1234678-HpCDF	67562-39-4	1.25	JB	4.92	0.0386	1
11031	1234789-HpCDF	55673-89-7	0.126	JB	4.92	0.0571	1
11031	OCDF	39001-02-0	3.27	JB	9.85	0.0445	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.212				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 08:44	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 03:30	Laura M Krieger	27.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:24	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:24	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 14:54	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 15:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 15:55	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:19	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276996
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:29	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:29	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:29	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:29	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276997
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	32		1.7	0.69	1
12969	Acenaphthylene	208-96-8	32		1.7	0.34	1
12969	Anthracene	120-12-7	33		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	33		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	31		18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	26		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	33		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	30		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	32		19	6.2	1
12969	Chrysene	218-01-9	34		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	30		1.7	0.69	1
12969	Diethylphthalate	84-66-2	32		19	6.2	1
12969	Dimethylphthalate	131-11-3	32		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	30		19	6.2	1
12969	Fluoranthene	206-44-0	36		1.7	0.69	1
12969	Fluorene	86-73-7	34		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	29		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.69	1
12969	Naphthalene	91-20-3	37		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	32		19	6.2	1
12969	Phenanthrene	85-01-8	32		1.7	0.69	1
12969	Pyrene	129-00-0	32		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.5		1.1	0.2	26.43
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	190		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.5	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	7.7		5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276997
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	28		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	50		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.1	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		41.4	7.46	1
06944	Antimony	7440-36-0	31.8		4.14	0.765	1
06935	Arsenic	7440-38-2	21.4		4.14	0.724	1
06946	Barium	7440-39-3	298		1.03	0.0341	1
06947	Beryllium	7440-41-7	5.92		1.03	0.0693	1
07914	Boron	7440-42-8	202		10.3	0.869	1
06949	Cadmium	7440-43-9	4.94		1.03	0.0786	1
01650	Calcium	7440-70-2	3,820		20.7	3.45	1
06951	Chromium	7440-47-3	43.5		3.10	0.165	1
06952	Cobalt	7440-48-4	55.4		1.03	0.102	1
06953	Copper	7440-50-8	37.2		2.07	0.300	1
01654	Iron	7439-89-6	26,800		41.4	3.74	1
06955	Lead	7439-92-1	21.5		3.10	0.517	1
01656	Lithium	7439-93-2	135		4.1	0.35	1
01657	Magnesium	7439-95-4	6,170		10.3	1.73	1
06958	Manganese	7439-96-5	398		1.03	0.0858	1
06960	Molybdenum	7439-98-7	193		2.07	0.176	1
06961	Nickel	7440-02-0	63.2		2.07	0.134	1
10145	Phosphorus	7723-14-0	553		10.3	2.99	1
01662	Potassium	7440-09-7	4,140		103	8.62	1
01667	Sodium	7440-23-5	1,120		103	17.3	1
06969	Tin	7440-31-5	360		10.3	0.228	1
06970	Titanium	7440-32-6	1,590		1.03	0.176	1
06971	Vanadium	7440-62-2	98.6		1.03	0.134	1
06972	Zinc	7440-66-6	111		4.14	0.207	1
10146	Zirconium	7440-67-7	102		5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.40		0.414	0.103	2
06142	Silver	7440-22-4	10.6		0.207	0.0269	2
06144	Strontium	7440-24-6	30.7		0.414	0.0703	2
06145	Thallium	7440-28-0	0.726		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.186		0.0167	0.010	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276997
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.7		0.991	0.0609	1
11031	12378-PeCDD	40321-76-4	103	B	4.95	0.0531	1
11031	123478-HxCDD	39227-28-6	107		4.95	0.0564	1
11031	123678-HxCDD	57653-85-7	107		4.95	0.0568	1
11031	123789-HxCDD	19408-74-3	106	B	4.95	0.0547	1
11031	1234678-HpCDD	35822-46-9	104	B	4.95	0.0519	1
11031	OCDD	3268-87-9	207	B	9.91	0.0523	1
11031	2378-TCDF	51207-31-9	20.8		0.991	0.0698	1
11031	12378-PeCDF	57117-41-6	105	B	4.95	0.0412	1
11031	23478-PeCDF	57117-31-4	107	B	4.95	0.0424	1
11031	123478-HxCDF	70648-26-9	107	B	4.95	0.0532	1
11031	123678-HxCDF	57117-44-9	108	B	4.95	0.0466	1
11031	123789-HxCDF	72918-21-9	106	B	4.95	0.0559	1
11031	234678-HxCDF	60851-34-5	106	B	4.95	0.0499	1
11031	1234678-HpCDF	67562-39-4	103	B	4.95	0.0477	1
11031	1234789-HpCDF	55673-89-7	107	B	4.95	0.0741	1
11031	OCDF	39001-02-0	209	B	9.91	0.0622	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276997
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 09:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 04:08	Laura M Krieger	26.43
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:26	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:26	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 15:13	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 17:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 16:52	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:30	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276997
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/27/2013 09:31	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:36	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:36	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:36	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:22	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276998
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	32		1.7	0.69	1
12969	Acenaphthylene	208-96-8	31		1.7	0.34	1
12969	Anthracene	120-12-7	33		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	33		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	32		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	37		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	25		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	32		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	30		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	33		19	6.2	1
12969	Chrysene	218-01-9	33		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	29		1.7	0.69	1
12969	Diethylphthalate	84-66-2	32		19	6.2	1
12969	Dimethylphthalate	131-11-3	32		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	29		19	6.2	1
12969	Fluoranthene	206-44-0	35		1.7	0.69	1
12969	Fluorene	86-73-7	34		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	28		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.69	1
12969	Naphthalene	91-20-3	38		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	29		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	31		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	31		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.0		1.1	0.2	26.32
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	180		18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	200		18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.3	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	6.8		5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276998
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	11		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	12		10	4.1	1
12952	EFH (C8-C11)	n.a.	3.6	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,800		41.4	7.46	1
06944	Antimony	7440-36-0	33.0		4.14	0.765	1
06935	Arsenic	7440-38-2	21.4		4.14	0.724	1
06946	Barium	7440-39-3	301		1.03	0.0341	1
06947	Beryllium	7440-41-7	5.96		1.03	0.0693	1
07914	Boron	7440-42-8	205		10.3	0.869	1
06949	Cadmium	7440-43-9	5.07		1.03	0.0786	1
01650	Calcium	7440-70-2	3,680		20.7	3.45	1
06951	Chromium	7440-47-3	44.9		3.10	0.165	1
06952	Cobalt	7440-48-4	55.6		1.03	0.102	1
06953	Copper	7440-50-8	38.1		2.07	0.300	1
01654	Iron	7439-89-6	27,100		41.4	3.74	1
06955	Lead	7439-92-1	25.3		3.10	0.517	1
01656	Lithium	7439-93-2	134		4.1	0.35	1
01657	Magnesium	7439-95-4	6,150		10.3	1.73	1
06958	Manganese	7439-96-5	399		1.03	0.0858	1
06960	Molybdenum	7439-98-7	194		2.07	0.176	1
06961	Nickel	7440-02-0	64.4		2.07	0.134	1
10145	Phosphorus	7723-14-0	546		10.3	2.99	1
01662	Potassium	7440-09-7	4,100		103	8.62	1
01667	Sodium	7440-23-5	1,100		103	17.3	1
06969	Tin	7440-31-5	362		10.3	0.228	1
06970	Titanium	7440-32-6	1,570		1.03	0.176	1
06971	Vanadium	7440-62-2	101		1.03	0.134	1
06972	Zinc	7440-66-6	114		4.14	0.207	1
10146	Zirconium	7440-67-7	101		5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.36		0.414	0.103	2
06142	Silver	7440-22-4	10.9		0.207	0.0269	2
06144	Strontium	7440-24-6	31.5		0.414	0.0703	2
06145	Thallium	7440-28-0	0.765		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.179		0.0169	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276998
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.6		1.00	0.0613	1
11031	12378-PeCDD	40321-76-4	102	B	5.01	0.0636	1
11031	123478-HxCDD	39227-28-6	108		5.01	0.0593	1
11031	123678-HxCDD	57653-85-7	106		5.01	0.0570	1
11031	123789-HxCDD	19408-74-3	106	B	5.01	0.0547	1
11031	1234678-HpCDD	35822-46-9	103	B	5.01	0.0635	1
11031	OCDD	3268-87-9	205	B	10.0	0.0622	1
11031	2378-TCDF	51207-31-9	20.9		1.00	0.0671	1
11031	12378-PeCDF	57117-41-6	107	B	5.01	0.0386	1
11031	23478-PeCDF	57117-31-4	107	B	5.01	0.0380	1
11031	123478-HxCDF	70648-26-9	107	B	5.01	0.0589	1
11031	123678-HxCDF	57117-44-9	108	B	5.01	0.0547	1
11031	123789-HxCDF	72918-21-9	107	B	5.01	0.0622	1
11031	234678-HxCDF	60851-34-5	106	B	5.01	0.0570	1
11031	1234678-HpCDF	67562-39-4	105	B	5.01	0.0458	1
11031	1234789-HpCDF	55673-89-7	109	B	5.01	0.0658	1
11031	OCDF	39001-02-0	209	B	10.0	0.0665	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276998
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 09:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 04:46	Laura M Krieger	26.32
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:27	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:28	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 15:31	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 16:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 17:49	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:34	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276998
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/27/2013 09:34	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:38	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:38	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:38	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:24	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276999
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		41.4	7.46	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.765	1
06935	Arsenic	7440-38-2	5.91		4.14	0.724	1
06946	Barium	7440-39-3	91.6		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.686	J	1.03	0.0693	1
07914	Boron	7440-42-8	2.17	J	10.3	0.869	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0786	1
01650	Calcium	7440-70-2	3,140		20.7	3.45	1
06951	Chromium	7440-47-3	23.5		3.10	0.165	1
06952	Cobalt	7440-48-4	6.63		1.03	0.102	1
06953	Copper	7440-50-8	10.8		2.07	0.300	1
01654	Iron	7439-89-6	25,800		41.4	3.74	1
06955	Lead	7439-92-1	6.92		3.10	0.517	1
01656	Lithium	7439-93-2	28.5		4.1	0.35	1
01657	Magnesium	7439-95-4	5,730		10.3	1.73	1
06958	Manganese	7439-96-5	366		1.03	0.0858	1
06960	Molybdenum	7439-98-7	0.314	J	2.07	0.176	1
06961	Nickel	7440-02-0	13.4		2.07	0.134	1
10145	Phosphorus	7723-14-0	437		10.3	2.99	1
01662	Potassium	7440-09-7	2,740		103	8.62	1
01667	Sodium	7440-23-5	95.6	J	103	17.3	1
06969	Tin	7440-31-5	2.99	J	10.3	0.228	1
06970	Titanium	7440-32-6	1,340		1.03	0.176	1
06971	Vanadium	7440-62-2	46.6		1.03	0.134	1
06972	Zinc	7440-66-6	58.7		4.14	0.207	1
10146	Zirconium	7440-67-7	4.68	J	5.17	0.869	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.119	J	0.414	0.103	2
06142	Silver	7440-22-4	0.0427	J	0.207	0.0269	2
06144	Strontium	7440-24-6	22.0		0.414	0.0703	2
06145	Thallium	7440-28-0	0.302		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165	U	0.0165	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.21		0.0100	0.0100	1
	The pH was measured in water at 19.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.3		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-654-SA5A-SB-3.0-4.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7276999
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2802 SDG#: PH128-02DUP

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:26	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:34	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:34	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:34	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:34	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.84	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.2	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	2.8		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.6	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.1	J	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	0.90	J	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.26
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,800		41.0	7.39	1
06944	Antimony	7440-36-0	4.10	U	4.10	0.758	1
06935	Arsenic	7440-38-2	6.77		4.10	0.717	1
06946	Barium	7440-39-3	85.5		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.680	J	1.02	0.0686	1
07914	Boron	7440-42-8	2.42	J	10.2	0.861	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0779	1
01650	Calcium	7440-70-2	2,960		20.5	3.42	1
06951	Chromium	7440-47-3	23.5		3.07	0.164	1
06952	Cobalt	7440-48-4	6.19		1.02	0.101	1
06953	Copper	7440-50-8	10.0		2.05	0.297	1
01654	Iron	7439-89-6	25,800		41.0	3.71	1
06955	Lead	7439-92-1	7.46		3.07	0.512	1
01656	Lithium	7439-93-2	28.6		4.1	0.35	1
01657	Magnesium	7439-95-4	5,490		10.2	1.71	1
06958	Manganese	7439-96-5	297		1.02	0.0850	1
06960	Molybdenum	7439-98-7	0.361	J	2.05	0.174	1
06961	Nickel	7440-02-0	13.4		2.05	0.133	1
10145	Phosphorus	7723-14-0	370		10.2	2.96	1
01662	Potassium	7440-09-7	2,340		102	8.54	1
01667	Sodium	7440-23-5	102	J	102	17.1	1
06969	Tin	7440-31-5	2.87	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,270		1.02	0.174	1
06971	Vanadium	7440-62-2	48.8		1.02	0.133	1
06972	Zinc	7440-66-6	55.8		4.10	0.205	1
10146	Zirconium	7440-67-7	4.12	J	5.12	0.861	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.198	J	0.410	0.102	2
06142	Silver	7440-22-4	0.0490	J	0.205	0.0266	2
06144	Strontium	7440-24-6	21.5		0.410	0.0697	2
06145	Thallium	7440-28-0	0.289		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.2 C.	n.a.	7.92		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0643	1
11031	12378-PeCDD	40321-76-4	0.314	JBQ	5.00	0.0594	1
11031	123478-HxCDD	39227-28-6	0.240	JQ	5.00	0.0481	1
11031	123678-HxCDD	57653-85-7	0.390	J	5.00	0.0507	1
11031	123789-HxCDD	19408-74-3	0.417	JB	5.00	0.0450	1
11031	1234678-HpCDD	35822-46-9	2.72	JB	5.00	0.0503	1
11031	OCDD	3268-87-9	27.7	B	10.0	0.0419	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.0601	1
11031	12378-PeCDF	57117-41-6	0.385	JBQ	5.00	0.0328	1
11031	23478-PeCDF	57117-31-4	0.295	JBQ	5.00	0.0329	1
11031	123478-HxCDF	70648-26-9	0.319	JBQ	5.00	0.0412	1
11031	123678-HxCDF	57117-44-9	0.247	JB	5.00	0.0359	1
11031	123789-HxCDF	72918-21-9	0.387	JB	5.00	0.0429	1
11031	234678-HxCDF	60851-34-5	0.296	JB	5.00	0.0389	1
11031	1234678-HpCDF	67562-39-4	0.705	JB	5.00	0.0270	1
11031	1234789-HpCDF	55673-89-7	0.304	JB	5.00	0.0367	1
11031	OCDF	39001-02-0	1.79	JB	10.0	0.0486	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.220				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 10:55	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/20/2013 23:44	Laura M Krieger	26.26
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:30	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:30	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 15:49	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 16:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 18:46	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:46	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-954-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277000
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:25

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2803 SDG#: PH128-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:46	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:46	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:46	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:46	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.9
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		41.2	7.42	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	4.51		4.12	0.721	1
06946	Barium	7440-39-3	90.4		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.523	J	1.03	0.0690	1
07914	Boron	7440-42-8	1.89	J	10.3	0.865	1
06949	Cadmium	7440-43-9	0.0875	J	1.03	0.0782	1
01650	Calcium	7440-70-2	3,180		20.6	3.44	1
06951	Chromium	7440-47-3	19.7		3.09	0.165	1
06952	Cobalt	7440-48-4	6.20		1.03	0.102	1
06953	Copper	7440-50-8	8.70		2.06	0.299	1
01654	Iron	7439-89-6	22,800		41.2	3.73	1
06955	Lead	7439-92-1	4.96		3.09	0.515	1
01656	Lithium	7439-93-2	24.6		4.1	0.35	1
01657	Magnesium	7439-95-4	5,400		10.3	1.72	1
06958	Manganese	7439-96-5	416		1.03	0.0855	1
06960	Molybdenum	7439-98-7	0.253	J	2.06	0.175	1
06961	Nickel	7440-02-0	10.6		2.06	0.134	1
10145	Phosphorus	7723-14-0	363		10.3	2.98	1
01662	Potassium	7440-09-7	1,770		103	8.59	1
01667	Sodium	7440-23-5	107		103	17.2	1
06969	Tin	7440-31-5	3.00	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,250		1.03	0.175	1
06971	Vanadium	7440-62-2	37.6		1.03	0.134	1
06972	Zinc	7440-66-6	52.4		4.12	0.206	1
10146	Zirconium	7440-67-7	4.26	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.412	U	0.412	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	21.1		0.412	0.0700	2
06145	Thallium	7440-28-0	0.294		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0174	U	0.0174	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.69		0.0100	0.0100	1
	The pH was measured in water at 19.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0638 JQ	1.04	0.0543	1
11031	12378-PeCDD	40321-76-4	0.0589 JBQ	5.22	0.0503	1
11031	123478-HxCDD	39227-28-6	0.0552 JQ	5.22	0.0285	1
11031	123678-HxCDD	57653-85-7	0.0899 JQ	5.22	0.0306	1
11031	123789-HxCDD	19408-74-3	0.0919 JB	5.22	0.0273	1
11031	1234678-HpCDD	35822-46-9	0.319 JB	5.22	0.0369	1
11031	OCDD	3268-87-9	2.37 JB	10.4	0.0408	1
11031	2378-TCDF	51207-31-9	1.04 U	1.04	0.0563	1
11031	12378-PeCDF	57117-41-6	0.105 JBQ	5.22	0.0251	1
11031	23478-PeCDF	57117-31-4	0.0993 JBQ	5.22	0.0264	1
11031	123478-HxCDF	70648-26-9	0.0788 JBQ	5.22	0.0261	1
11031	123678-HxCDF	57117-44-9	0.0746 JBQ	5.22	0.0231	1
11031	123789-HxCDF	72918-21-9	0.0826 JBQ	5.22	0.0276	1
11031	234678-HxCDF	60851-34-5	0.0754 JBQ	5.22	0.0249	1
11031	1234678-HpCDF	67562-39-4	0.131 JB	5.22	0.0135	1
11031	1234789-HpCDF	55673-89-7	0.0733 JBQ	5.22	0.0220	1
11031	OCDF	39001-02-0	0.405 JBQ	10.4	0.0437	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0144			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 11:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 00:21	Laura M Krieger	24.9
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:32	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:32	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 16:08	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 12:06	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 19:42	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 22:58	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277001
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2804 SDG#: PH128-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:53	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:53	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:53	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:53	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		40.1	7.23	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.742	1
06935	Arsenic	7440-38-2	5.28		4.01	0.702	1
06946	Barium	7440-39-3	101		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.691	J	1.00	0.0672	1
07914	Boron	7440-42-8	3.72	J	10.0	0.842	1
06949	Cadmium	7440-43-9	0.120	J	1.00	0.0762	1
01650	Calcium	7440-70-2	2,430		20.1	3.35	1
06951	Chromium	7440-47-3	22.9		3.01	0.160	1
06952	Cobalt	7440-48-4	5.96		1.00	0.0993	1
06953	Copper	7440-50-8	10.5		2.01	0.291	1
01654	Iron	7439-89-6	24,300		40.1	3.63	1
06955	Lead	7439-92-1	6.80		3.01	0.501	1
01656	Lithium	7439-93-2	23.8		4.0	0.34	1
01657	Magnesium	7439-95-4	4,630		10.0	1.67	1
06958	Manganese	7439-96-5	328		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.425	J	2.01	0.171	1
06961	Nickel	7440-02-0	13.6		2.01	0.130	1
10145	Phosphorus	7723-14-0	345		10.0	2.90	1
01662	Potassium	7440-09-7	2,480		100	8.36	1
01667	Sodium	7440-23-5	114		100	16.7	1
06969	Tin	7440-31-5	2.57	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,150		1.00	0.171	1
06971	Vanadium	7440-62-2	43.2		1.00	0.130	1
06972	Zinc	7440-66-6	51.7		4.01	0.201	1
10146	Zirconium	7440-67-7	4.25	J	5.01	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.173	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0421	J	0.201	0.0261	2
06144	Strontium	7440-24-6	21.0		0.401	0.0682	2
06145	Thallium	7440-28-0	0.291		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.76		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.01 U	1.01	0.0432	1
11031	12378-PeCDD	40321-76-4	0.0746 JBQ	5.06	0.0375	1
11031	123478-HxCDD	39227-28-6	5.06 U	5.06	0.0296	1
11031	123678-HxCDD	57653-85-7	0.150 JQ	5.06	0.0322	1
11031	123789-HxCDD	19408-74-3	0.428 JBQ	5.06	0.0294	1
11031	1234678-HpCDD	35822-46-9	0.235 JBQ	5.06	0.0286	1
11031	OCDD	3268-87-9	1.91 JB	10.1	0.0318	1
11031	2378-TCDF	51207-31-9	1.01 U	1.01	0.0392	1
11031	12378-PeCDF	57117-41-6	0.0870 JB	5.06	0.0196	1
11031	23478-PeCDF	57117-31-4	0.0596 JBQ	5.06	0.0212	1
11031	123478-HxCDF	70648-26-9	0.0613 JBQ	5.06	0.0214	1
11031	123678-HxCDF	57117-44-9	0.0442 JBQ	5.06	0.0182	1
11031	123789-HxCDF	72918-21-9	0.237 JBQ	5.06	0.0241	1
11031	234678-HxCDF	60851-34-5	0.0642 JB	5.06	0.0197	1
11031	1234678-HpCDF	67562-39-4	0.0671 JBQ	5.06	0.0102	1
11031	1234789-HpCDF	55673-89-7	0.0717 JBQ	5.06	0.0164	1
11031	OCDF	39001-02-0	0.237 JBQ	10.1	0.0338	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00961			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 12:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 16:26	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 12:27	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 20:39	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:02	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:55	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:55	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:55	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:55	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277002
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2805 SDG#: PH128-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:34	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.4	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.61	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	4.65		4.08	0.714	1
06946	Barium	7440-39-3	87.6		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.522	J	1.02	0.0683	1
07914	Boron	7440-42-8	2.98	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.110	J	1.02	0.0775	1
01650	Calcium	7440-70-2	2,490		20.4	3.41	1
06951	Chromium	7440-47-3	19.7		3.06	0.163	1
06952	Cobalt	7440-48-4	6.13		1.02	0.101	1
06953	Copper	7440-50-8	14.8		2.04	0.296	1
01654	Iron	7439-89-6	20,900		40.8	3.69	1
06955	Lead	7439-92-1	6.66		3.06	0.510	1
01656	Lithium	7439-93-2	20.2		4.1	0.35	1
01657	Magnesium	7439-95-4	4,780		10.2	1.70	1
06958	Manganese	7439-96-5	283		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.474	J	2.04	0.173	1
06961	Nickel	7440-02-0	11.7		2.04	0.133	1
10145	Phosphorus	7723-14-0	397		10.2	2.95	1
01662	Potassium	7440-09-7	3,100		102	8.50	1
01667	Sodium	7440-23-5	90.2	J	102	17.0	1
06969	Tin	7440-31-5	2.45	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,040		1.02	0.173	1
06971	Vanadium	7440-62-2	37.6		1.02	0.133	1
06972	Zinc	7440-66-6	53.0		4.08	0.204	1
10146	Zirconium	7440-67-7	2.57	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0291	J	0.204	0.0265	2
06144	Strontium	7440-24-6	17.0		0.408	0.0693	2
06145	Thallium	7440-28-0	0.259		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.81		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0629 JQ	1.03	0.0568	1
11031	12378-PeCDD	40321-76-4	0.101 JBQ	5.13	0.0528	1
11031	123478-HxCDD	39227-28-6	0.0459 JQ	5.13	0.0438	1
11031	123678-HxCDD	57653-85-7	0.318 J	5.13	0.0474	1
11031	123789-HxCDD	19408-74-3	0.449 JB	5.13	0.0428	1
11031	1234678-HpCDD	35822-46-9	1.67 JB	5.13	0.0437	1
11031	OCDD	3268-87-9	24.6 B	10.3	0.0443	1
11031	2378-TCDF	51207-31-9	0.0996 JQ	1.03	0.0608	1
11031	12378-PeCDF	57117-41-6	0.160 JBQ	5.13	0.0291	1
11031	23478-PeCDF	57117-31-4	0.158 JBQ	5.13	0.0311	1
11031	123478-HxCDF	70648-26-9	0.0645 JBQ	5.13	0.0353	1
11031	123678-HxCDF	57117-44-9	0.0757 JBQ	5.13	0.0306	1
11031	123789-HxCDF	72918-21-9	0.262 JB	5.13	0.0378	1
11031	234678-HxCDF	60851-34-5	0.0977 JBQ	5.13	0.0312	1
11031	1234678-HpCDF	67562-39-4	0.353 JBQ	5.13	0.0178	1
11031	1234789-HpCDF	55673-89-7	0.0550 JBQ	5.13	0.0301	1
11031	OCDF	39001-02-0	0.944 JBQ	10.3	0.0535	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.127			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	89	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	94	26 - 123
13C12-234678-HxCDF	88	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 12:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 16:45	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 12:49	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/25/2013 21:36	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:06	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 12:58	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 12:58	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 12:58	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 12:58	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277003
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 09:35

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2806 SDG#: PH128-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:36	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.5
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,800		43.2	7.78	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.799	1
06935	Arsenic	7440-38-2	5.52		4.32	0.756	1
06946	Barium	7440-39-3	66.7		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.626	J	1.08	0.0723	1
07914	Boron	7440-42-8	1.94	J	10.8	0.907	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0821	1
01650	Calcium	7440-70-2	2,330		21.6	3.61	1
06951	Chromium	7440-47-3	19.3		3.24	0.173	1
06952	Cobalt	7440-48-4	3.24		1.08	0.107	1
06953	Copper	7440-50-8	9.84		2.16	0.313	1
01654	Iron	7439-89-6	21,000		43.2	3.91	1
06955	Lead	7439-92-1	6.39		3.24	0.540	1
01656	Lithium	7439-93-2	33.3		4.3	0.37	1
01657	Magnesium	7439-95-4	3,710		10.8	1.80	1
06958	Manganese	7439-96-5	138		1.08	0.0896	1
06960	Molybdenum	7439-98-7	0.483	J	2.16	0.184	1
06961	Nickel	7440-02-0	9.74		2.16	0.140	1
10145	Phosphorus	7723-14-0	140		10.8	3.12	1
01662	Potassium	7440-09-7	1,380		108	9.00	1
01667	Sodium	7440-23-5	108	J	108	18.0	1
06969	Tin	7440-31-5	2.69	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,130		1.08	0.184	1
06971	Vanadium	7440-62-2	39.4		1.08	0.140	1
06972	Zinc	7440-66-6	37.8		4.32	0.216	1
10146	Zirconium	7440-67-7	4.10	J	5.40	0.907	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.432	U	0.432	0.108	2
06142	Silver	7440-22-4	0.0545	J	0.216	0.0281	2
06144	Strontium	7440-24-6	16.6		0.432	0.0734	2
06145	Thallium	7440-28-0	0.258		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0118	J	0.0180	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.45		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.130	JQ	1.08	0.0587	1
11031	12378-PeCDD	40321-76-4	0.210	JBQ	5.41	0.0432	1
11031	123478-HxCDD	39227-28-6	0.0973	J	5.41	0.0289	1
11031	123678-HxCDD	57653-85-7	0.130	J	5.41	0.0317	1
11031	123789-HxCDD	19408-74-3	0.0991	JBQ	5.41	0.0287	1
11031	1234678-HpCDD	35822-46-9	0.136	JBQ	5.41	0.0292	1
11031	OCDD	3268-87-9	0.473	JB	10.8	0.0434	1
11031	2378-TCDF	51207-31-9	0.0646	JQ	1.08	0.0503	1
11031	12378-PeCDF	57117-41-6	0.264	JB	5.41	0.0296	1
11031	23478-PeCDF	57117-31-4	0.287	JB	5.41	0.0294	1
11031	123478-HxCDF	70648-26-9	0.136	JBQ	5.41	0.0303	1
11031	123678-HxCDF	57117-44-9	0.165	JB	5.41	0.0264	1
11031	123789-HxCDF	72918-21-9	0.113	JB	5.41	0.0303	1
11031	234678-HxCDF	60851-34-5	0.134	JBQ	5.41	0.0269	1
11031	1234678-HpCDF	67562-39-4	0.160	JB	5.41	0.0132	1
11031	1234789-HpCDF	55673-89-7	0.132	JBQ	5.41	0.0202	1
11031	OCDF	39001-02-0	0.313	JB	10.8	0.0492	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.146				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 13:04	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 00:59	Laura M Krieger	23.5
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:33	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 17:03	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 13:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 01:30	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:10	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277004
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 10:45

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2807 SDG#: PH128-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:00	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:00	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:00	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:00	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:38	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		42.1	7.59	1
06944	Antimony	7440-36-0	4.21	U	4.21	0.779	1
06935	Arsenic	7440-38-2	3.83	J	4.21	0.737	1
06946	Barium	7440-39-3	81.8		1.05	0.0348	1
06947	Beryllium	7440-41-7	0.607	J	1.05	0.0706	1
07914	Boron	7440-42-8	1.75	J	10.5	0.885	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0801	1
01650	Calcium	7440-70-2	2,700		21.1	3.52	1
06951	Chromium	7440-47-3	19.4		3.16	0.169	1
06952	Cobalt	7440-48-4	5.53		1.05	0.104	1
06953	Copper	7440-50-8	7.10		2.11	0.305	1
01654	Iron	7439-89-6	22,600		42.1	3.81	1
06955	Lead	7439-92-1	5.41		3.16	0.527	1
01656	Lithium	7439-93-2	29.2		4.2	0.36	1
01657	Magnesium	7439-95-4	5,030		10.5	1.76	1
06958	Manganese	7439-96-5	256		1.05	0.0874	1
06960	Molybdenum	7439-98-7	0.211	J	2.11	0.179	1
06961	Nickel	7440-02-0	10.5		2.11	0.137	1
10145	Phosphorus	7723-14-0	264		10.5	3.04	1
01662	Potassium	7440-09-7	1,600		105	8.78	1
01667	Sodium	7440-23-5	104	J	105	17.6	1
06969	Tin	7440-31-5	2.89	J	10.5	0.232	1
06970	Titanium	7440-32-6	1,160		1.05	0.179	1
06971	Vanadium	7440-62-2	38.1		1.05	0.137	1
06972	Zinc	7440-66-6	46.9		4.21	0.211	1
10146	Zirconium	7440-67-7	3.17	J	5.27	0.885	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.421	U	0.421	0.105	2
06142	Silver	7440-22-4	0.211	U	0.211	0.0274	2
06144	Strontium	7440-24-6	20.6		0.421	0.0716	2
06145	Thallium	7440-28-0	0.263		0.211	0.0316	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0173	U	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.9 C.	n.a.	7.53		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	6.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0826 J	1.06	0.0410	1
11031	12378-PeCDD	40321-76-4	0.230 JBQ	5.29	0.0310	1
11031	123478-HxCDD	39227-28-6	0.0695 J	5.29	0.0229	1
11031	123678-HxCDD	57653-85-7	0.0951 JQ	5.29	0.0246	1
11031	123789-HxCDD	19408-74-3	0.114 JBQ	5.29	0.0233	1
11031	1234678-HpCDD	35822-46-9	0.174 JBQ	5.29	0.0276	1
11031	OCDD	3268-87-9	0.869 JB	10.6	0.0316	1
11031	2378-TCDF	51207-31-9	0.0707 JQ	1.06	0.0417	1
11031	12378-PeCDF	57117-41-6	0.336 JB	5.29	0.0195	1
11031	23478-PeCDF	57117-31-4	0.243 JB	5.29	0.0204	1
11031	123478-HxCDF	70648-26-9	0.152 JB	5.29	0.0216	1
11031	123678-HxCDF	57117-44-9	0.173 JB	5.29	0.0190	1
11031	123789-HxCDF	72918-21-9	0.130 JBQ	5.29	0.0238	1
11031	234678-HxCDF	60851-34-5	0.123 JBQ	5.29	0.0195	1
11031	1234678-HpCDF	67562-39-4	0.0887 JB	5.29	0.00947	1
11031	1234789-HpCDF	55673-89-7	0.0617 JBQ	5.29	0.0153	1
11031	OCDF	39001-02-0	0.211 JB	10.6	0.0345	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.206			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/25/2013 13:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 01:37	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:35	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:35	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 17:22	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 13:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 02:27	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:14	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-657-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277005
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:20

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2808 SDG#: PH128-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:02	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:02	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:02	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:02	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:40	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.43	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	0.88	J	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.5	J	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.75	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.72
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,200		44.2	7.97	1
06944	Antimony	7440-36-0	4.42	U	4.42	0.818	1
06935	Arsenic	7440-38-2	6.61		4.42	0.774	1
06946	Barium	7440-39-3	111		1.11	0.0365	1
06947	Beryllium	7440-41-7	0.882	J	1.11	0.0741	1
07914	Boron	7440-42-8	2.15	J	11.1	0.928	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0840	1
01650	Calcium	7440-70-2	3,170		22.1	3.69	1
06951	Chromium	7440-47-3	27.0		3.32	0.177	1
06952	Cobalt	7440-48-4	5.96		1.11	0.109	1
06953	Copper	7440-50-8	11.3		2.21	0.321	1
01654	Iron	7439-89-6	28,000		44.2	4.00	1
06955	Lead	7439-92-1	8.03		3.32	0.553	1
01656	Lithium	7439-93-2	33.5		4.4	0.38	1
01657	Magnesium	7439-95-4	5,270		11.1	1.85	1
06958	Manganese	7439-96-5	217		1.11	0.0917	1
06960	Molybdenum	7439-98-7	0.690	J	2.21	0.188	1
06961	Nickel	7440-02-0	14.7		2.21	0.144	1
10145	Phosphorus	7723-14-0	229		11.1	3.19	1
01662	Potassium	7440-09-7	1,310		111	9.22	1
01667	Sodium	7440-23-5	128		111	18.5	1
06969	Tin	7440-31-5	3.31	J	11.1	0.243	1
06970	Titanium	7440-32-6	1,340		1.11	0.188	1
06971	Vanadium	7440-62-2	51.5		1.11	0.144	1
06972	Zinc	7440-66-6	51.4		4.42	0.221	1
10146	Zirconium	7440-67-7	5.25	J	5.53	0.928	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.442	U	0.442	0.111	2
06142	Silver	7440-22-4	0.0629	J	0.221	0.0287	2
06144	Strontium	7440-24-6	26.6		0.442	0.0752	2
06145	Thallium	7440-28-0	0.240		0.221	0.0332	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0178	0.0107	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	7.39		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0760	JQ	1.10	0.0446	1
11031	12378-PeCDD	40321-76-4	0.177	JB	5.48	0.0406	1
11031	123478-HxCDD	39227-28-6	0.0447	JQ	5.48	0.0313	1
11031	123678-HxCDD	57653-85-7	0.0987	JQ	5.48	0.0326	1
11031	123789-HxCDD	19408-74-3	0.0978	JB	5.48	0.0327	1
11031	1234678-HpCDD	35822-46-9	1.14	JB	5.48	0.0455	1
11031	OCDD	3268-87-9	6.64	JB	11.0	0.0442	1
11031	2378-TCDF	51207-31-9	1.10	U	1.10	0.0444	1
11031	12378-PeCDF	57117-41-6	0.170	JB	5.48	0.0251	1
11031	23478-PeCDF	57117-31-4	0.164	JBQ	5.48	0.0250	1
11031	123478-HxCDF	70648-26-9	0.0852	JB	5.48	0.0218	1
11031	123678-HxCDF	57117-44-9	0.0790	JB	5.48	0.0200	1
11031	123789-HxCDF	72918-21-9	0.0847	JBQ	5.48	0.0214	1
11031	234678-HxCDF	60851-34-5	0.0667	JBQ	5.48	0.0201	1
11031	1234678-HpCDF	67562-39-4	0.120	JBQ	5.48	0.0156	1
11031	1234789-HpCDF	55673-89-7	0.0603	JBQ	5.48	0.0231	1
11031	OCDF	39001-02-0	0.349	JBQ	11.0	0.0392	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.222				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/26/2013 00:40	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 02:15	Laura M Krieger	23.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:36	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:36	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 17:40	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 13:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 03:24	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:18	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-658-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277006
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 14:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2809 SDG#: PH128-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:05	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:05	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:05	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:05	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:42	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402A	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		40.1	7.24	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.743	1
06935	Arsenic	7440-38-2	4.16		4.01	0.703	1
06946	Barium	7440-39-3	108		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.574	J	1.00	0.0672	1
07914	Boron	7440-42-8	4.84	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.211	J	1.00	0.0763	1
01650	Calcium	7440-70-2	1,580		20.1	3.35	1
06951	Chromium	7440-47-3	18.8		3.01	0.161	1
06952	Cobalt	7440-48-4	5.71		1.00	0.0994	1
06953	Copper	7440-50-8	11.4		2.01	0.291	1
01654	Iron	7439-89-6	19,100		40.1	3.63	1
06955	Lead	7439-92-1	6.05		3.01	0.502	1
01656	Lithium	7439-93-2	15.9		4.0	0.34	1
01657	Magnesium	7439-95-4	3,670		10.0	1.68	1
06958	Manganese	7439-96-5	313		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.454	J	2.01	0.171	1
06961	Nickel	7440-02-0	12.0		2.01	0.130	1
10145	Phosphorus	7723-14-0	231		10.0	2.90	1
01662	Potassium	7440-09-7	3,130		100	8.37	1
01667	Sodium	7440-23-5	137		100	16.8	1
06969	Tin	7440-31-5	2.47	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,050		1.00	0.171	1
06971	Vanadium	7440-62-2	34.5		1.00	0.130	1
06972	Zinc	7440-66-6	48.0		4.01	0.201	1
10146	Zirconium	7440-67-7	3.20	J	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.144	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0283	J	0.201	0.0261	2
06144	Strontium	7440-24-6	19.2		0.401	0.0683	2
06145	Thallium	7440-28-0	0.289		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	5.87		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	4.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0422 JQ	1.03	0.0411	1
11031	12378-PeCDD	40321-76-4	0.111 JBQ	5.13	0.0382	1
11031	123478-HxCDD	39227-28-6	0.0350 J	5.13	0.0280	1
11031	123678-HxCDD	57653-85-7	0.306 JQ	5.13	0.0291	1
11031	123789-HxCDD	19408-74-3	0.441 JB	5.13	0.0287	1
11031	1234678-HpCDD	35822-46-9	0.102 JBQ	5.13	0.0240	1
11031	OCDD	3268-87-9	0.737 JB	10.3	0.0330	1
11031	2378-TCDF	51207-31-9	0.0540 JQ	1.03	0.0450	1
11031	12378-PeCDF	57117-41-6	0.0865 JBQ	5.13	0.0204	1
11031	23478-PeCDF	57117-31-4	0.0614 JBQ	5.13	0.0212	1
11031	123478-HxCDF	70648-26-9	0.0349 JB	5.13	0.0212	1
11031	123678-HxCDF	57117-44-9	0.0527 JBQ	5.13	0.0186	1
11031	123789-HxCDF	72918-21-9	0.285 JB	5.13	0.0220	1
11031	234678-HxCDF	60851-34-5	0.0232 JBQ	5.13	0.0188	1
11031	1234678-HpCDF	67562-39-4	0.0567 JBQ	5.13	0.00950	1
11031	1234789-HpCDF	55673-89-7	0.0398 JBQ	5.13	0.0161	1
11031	OCDF	39001-02-0	0.136 JBQ	10.3	0.0342	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0799			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	58	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/26/2013 01:13	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 17:58	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 14:14	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 04:21	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:22	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:07	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:07	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:07	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:07	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277007
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:30

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2810 SDG#: PH128-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:44	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402B	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.51
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	5.47		4.09	0.716	1
06946	Barium	7440-39-3	76.2		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.541	J	1.02	0.0685	1
07914	Boron	7440-42-8	1.53	J	10.2	0.859	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0777	1
01650	Calcium	7440-70-2	2,130		20.4	3.41	1
06951	Chromium	7440-47-3	17.7		3.07	0.164	1
06952	Cobalt	7440-48-4	4.00		1.02	0.101	1
06953	Copper	7440-50-8	6.89		2.04	0.296	1
01654	Iron	7439-89-6	21,600		40.9	3.70	1
06955	Lead	7439-92-1	5.78		3.07	0.511	1
01656	Lithium	7439-93-2	24.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,220		10.2	1.71	1
06958	Manganese	7439-96-5	158		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.186	J	2.04	0.174	1
06961	Nickel	7440-02-0	9.16		2.04	0.133	1
10145	Phosphorus	7723-14-0	113		10.2	2.95	1
01662	Potassium	7440-09-7	1,530		102	8.53	1
01667	Sodium	7440-23-5	308		102	17.1	1
06969	Tin	7440-31-5	2.84	J	10.2	0.225	1
06970	Titanium	7440-32-6	993		1.02	0.174	1
06971	Vanadium	7440-62-2	34.8		1.02	0.133	1
06972	Zinc	7440-66-6	44.5		4.09	0.204	1
10146	Zirconium	7440-67-7	3.18	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.409	U	0.409	0.102	2
06142	Silver	7440-22-4	0.204	U	0.204	0.0266	2
06144	Strontium	7440-24-6	20.2		0.409	0.0695	2
06145	Thallium	7440-28-0	0.216		0.204	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169	U	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.55		0.0100	0.0100	1
	The pH was measured in water at 20.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.1		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0441	1
11031	12378-PeCDD	40321-76-4	5.11	U	5.11	0.0462	1
11031	123478-HxCDD	39227-28-6	5.11	U	5.11	0.0235	1
11031	123678-HxCDD	57653-85-7	0.0347	JQ	5.11	0.0245	1
11031	123789-HxCDD	19408-74-3	0.0551	JBQ	5.11	0.0216	1
11031	1234678-HpCDD	35822-46-9	0.0927	JBQ	5.11	0.0338	1
11031	OCDD	3268-87-9	0.358	JBQ	10.2	0.0504	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0432	1
11031	12378-PeCDF	57117-41-6	0.0468	JB	5.11	0.0211	1
11031	23478-PeCDF	57117-31-4	0.0397	JBQ	5.11	0.0208	1
11031	123478-HxCDF	70648-26-9	0.0242	JBQ	5.11	0.0189	1
11031	123678-HxCDF	57117-44-9	0.0271	JBQ	5.11	0.0168	1
11031	123789-HxCDF	72918-21-9	0.0327	JBQ	5.11	0.0187	1
11031	234678-HxCDF	60851-34-5	0.0274	JBQ	5.11	0.0181	1
11031	1234678-HpCDF	67562-39-4	0.0462	JBQ	5.11	0.0152	1
11031	1234789-HpCDF	55673-89-7	5.11	U	5.11	0.0222	1
11031	OCDF	39001-02-0	0.123	JBQ	10.2	0.0460	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00136				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/26/2013 01:46	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13322B16A	11/21/2013 02:52	Laura M Krieger	25.51
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331833128	11/14/2013 19:38	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331833128	11/14/2013 19:38	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 18:17	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 14:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 10:01	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:26	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-667-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277008
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 13:40

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2811 SDG#: PH128-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:09	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:09	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:09	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:09	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:46	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402B	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.92	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.3	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.6	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.84	J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.0	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.82	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		40.7	7.34	1
06944	Antimony	7440-36-0	4.07	U	4.07	0.753	1
06935	Arsenic	7440-38-2	6.09		4.07	0.712	1
06946	Barium	7440-39-3	93.9		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.698	J	1.02	0.0682	1
07914	Boron	7440-42-8	4.90	J	10.2	0.855	1
06949	Cadmium	7440-43-9	0.275	J	1.02	0.0773	1
01650	Calcium	7440-70-2	8,180		20.4	3.40	1
06951	Chromium	7440-47-3	20.3		3.05	0.163	1
06952	Cobalt	7440-48-4	6.74		1.02	0.101	1
06953	Copper	7440-50-8	12.3		2.04	0.295	1
01654	Iron	7439-89-6	24,000		40.7	3.68	1
06955	Lead	7439-92-1	7.17		3.05	0.509	1
01656	Lithium	7439-93-2	24.8		4.1	0.35	1
01657	Magnesium	7439-95-4	5,020		10.2	1.70	1
06958	Manganese	7439-96-5	285		1.02	0.0845	1
06960	Molybdenum	7439-98-7	0.280	J	2.04	0.173	1
06961	Nickel	7440-02-0	12.8		2.04	0.132	1
10145	Phosphorus	7723-14-0	322		10.2	2.94	1
01662	Potassium	7440-09-7	2,280		102	8.49	1
01667	Sodium	7440-23-5	342		102	17.0	1
06969	Tin	7440-31-5	2.98	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,180		1.02	0.173	1
06971	Vanadium	7440-62-2	40.4		1.02	0.132	1
06972	Zinc	7440-66-6	66.4		4.07	0.204	1
10146	Zirconium	7440-67-7	4.24	J	5.09	0.855	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.407	U	0.407	0.102	2
06142	Silver	7440-22-4	0.0276	J	0.204	0.0265	2
06144	Strontium	7440-24-6	38.3		0.407	0.0692	2
06145	Thallium	7440-28-0	0.257		0.204	0.0305	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0161	U	0.0161	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.14		0.0100	0.0100	1
	The pH was measured in water at 20.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.198	JQ	1.02	0.0474	1
11031	12378-PeCDD	40321-76-4	0.358	JB	5.09	0.0613	1
11031	123478-HxCDD	39227-28-6	5.09	U	5.09	0.0392	1
11031	123678-HxCDD	57653-85-7	0.138	JQ	5.09	0.0411	1
11031	123789-HxCDD	19408-74-3	0.271	JB	5.09	0.0382	1
11031	1234678-HpCDD	35822-46-9	2.03	JB	5.09	0.0340	1
11031	OCDD	3268-87-9	22.7	B	10.2	0.0475	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0427	1
11031	12378-PeCDF	57117-41-6	0.0768	JB	5.09	0.0249	1
11031	23478-PeCDF	57117-31-4	0.0419	JBQ	5.09	0.0246	1
11031	123478-HxCDF	70648-26-9	0.0567	JBQ	5.09	0.0231	1
11031	123678-HxCDF	57117-44-9	0.0730	JBQ	5.09	0.0213	1
11031	123789-HxCDF	72918-21-9	0.0876	JB	5.09	0.0228	1
11031	234678-HxCDF	60851-34-5	0.0543	JBQ	5.09	0.0219	1
11031	1234678-HpCDF	67562-39-4	0.286	JB	5.09	0.0129	1
11031	1234789-HpCDF	55673-89-7	0.0336	JBQ	5.09	0.0181	1
11031	OCDF	39001-02-0	0.545	JB	10.2	0.0342	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.427				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322SLI026	11/26/2013 02:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13322SLI026	11/19/2013 09:00	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133240014A	11/22/2013 18:35	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133240014A	11/20/2013 22:35	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133230032A	11/22/2013 14:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133230032A	11/20/2013 09:00	Kerrie A Freeburn	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13325001	11/26/2013 06:14	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13325001	11/21/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133250637008	11/24/2013 23:30	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133250637008B	11/26/2013 13:12	Deborah A Krady	2
06142	Silver	SW-846 6020A	1	133250637008A	11/26/2013 13:12	Deborah A Krady	2
06144	Strontium	SW-846 6020A	1	133250637008A	11/26/2013 13:12	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133250637008A	11/26/2013 13:12	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-670-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7277009
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 12:50

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2812 SDG#: PH128-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133250638004	11/25/2013 10:48	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133250637008	11/24/2013 10:14	Annamaria Stipkovits	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133250638004	11/24/2013 13:45	Annamaria Stipkovits	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13318039402B	11/14/2013 20:00	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162402B	11/19/2013 10:55	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-111313 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7277010
LL Group # 1433971
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/13/2013 08:00

Submitted: 11/14/2013 09:15
Reported: 12/03/2013 11:38

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2813 SDG#: PH128-13TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13318B94A	11/15/2013 13:46	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13318B94A	11/15/2013 13:46	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13322SLI026	Sample number(s): 7276995-7276998,7277000-7277009									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	93		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	96		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	98		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	96		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	107		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	89		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	106		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	96		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	89		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	94		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	99		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	107		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	100		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	99		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	84		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	101		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	99		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	109		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	84		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	85		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	94		79-112		
Batch number: 13318B94A	Sample number(s): 7277010									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	109	110	75-135	1	30
Batch number: 13322B16A	Sample number(s): 7276996-7276998,7277000-7277001,7277004-7277006,7277008									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	88		67-119		
Batch number: 133240014A	Sample number(s): 7276995-7276998,7277000-7277009									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	85	88*	62-87	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	108		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1260	17	U	17.	3.9	ug/kg	119		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133230032A	Sample number(s): 7276995-7276998,7277000-7277009									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	88		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	91		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	90		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	76		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	74		60-115		
Batch number: 133250637008	Sample number(s): 7276995-7277009									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	104		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	99		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	100		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	102		80-120		
Calcium	6.78	J	20.0	3.34	mg/kg	101		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	99		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	103		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	4.94	J	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	100		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	106		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	105		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.37	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	101		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	102		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 133250637008A	Sample number(s): 7276995-7277009									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	103		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	101		80-120		
Batch number: 133250637008B	Sample number(s): 7276995-7277009									
Selenium	0.400	U	0.400	0.100	mg/kg	115		80-120		
Batch number: 133250638004	Sample number(s): 7276995-7277009									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	97		85-120		
Batch number: 13318039402A	Sample number(s): 7276995-7276996,7276999-7277006									
15a pH by 9045D						99		95-105		
Batch number: 13318039402B	Sample number(s): 7277007-7277009									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
15a pH by 9045D						99		95-105		
Batch number: 13323162402B	Sample number(s): 7276995-7277009									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13325001	Sample number(s): 7276995-7276998,7277000-7277009									
2378-TCDD	1.00	U	1.00	0.0428	ng/kg	98		67-158		
12378-PeCDD	0.0848	J	5.00	0.0373	ng/kg	105		70-142		
123478-HxCDD	5.00	U	5.00	0.0228	ng/kg	108		70-164		
123678-HxCDD	5.00	U	5.00	0.0234	ng/kg	108		76-134		
123789-HxCDD	0.0270	J	5.00	0.0213	ng/kg	108		64-162		
1234678-HpCDD	0.0754	J	5.00	0.0229	ng/kg	105		70-140		
OCDD	0.225	J	10.0	0.0364	ng/kg	102		78-144		
2378-TCDF	1.00	U	1.00	0.0436	ng/kg	110		75-158		
12378-PeCDF	0.0700	J	5.00	0.0209	ng/kg	108		80-134		
23478-PeCDF	0.0792	J	5.00	0.0209	ng/kg	110		68-160		
123478-HxCDF	0.0540	J	5.00	0.0167	ng/kg	106		72-134		
123678-HxCDF	0.0522	J	5.00	0.0146	ng/kg	109		84-130		
123789-HxCDF	0.0889	J	5.00	0.0184	ng/kg	108		78-130		
234678-HxCDF	0.0585	J	5.00	0.0161	ng/kg	106		70-156		
1234678-HpCDF	0.0733	J	5.00	0.00860	ng/kg	106		82-122		
1234789-HpCDF	0.0426	J	5.00	0.0141	ng/kg	110		78-138		
OCDF	0.168	J	10.0	0.0391	ng/kg	105		63-170		
TEQ WHO 2005 - EDLx0.0	0.000100				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13322SLI026	Sample number(s): 7276995-7276998,7277000-7277009 UNSPK: 7276996								
Acenaphthene	94	93	48-127	0	30				
Acenaphthylene	92	91	49-121	0	30				
Anthracene	94	93	52-126	0	30				
Benzo(a)anthracene	86	82	44-143	3	30				
Benzo(a)pyrene	79	75	44-140	4	30				
Benzo(b)fluoranthene	78	73	26-142	4	30				
Benzo(e)pyrene	69*	66*	70-130	4	30				
Benzo(g,h,i)perylene	63	59	33-141	5	30				
Benzo(k)fluoranthene	87	83	54-142	3	30				
Butylbenzylphthalate	87	86	49-151	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-butylphthalate	94	94	52-147	1	30				
Chrysene	82	78	29-148	4	30				
Dibenz(a,h)anthracene	83	80	20-137	3	30				
Diethylphthalate	93	93	43-145	0	30				
Dimethylphthalate	93	94	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	86	85	39-167	1	30				
Fluoranthene	91	88	40-148	3	30				
Fluorene	99	99	51-137	0	30				
Indeno(1,2,3-cd)pyrene	68	65	17-136	4	30				
1-Methylnaphthalene	101	102	50-131	1	30				
2-Methylnaphthalene	100	100	35-152	1	30				
Naphthalene	108	109	31-148	1	30				
N-Nitrosodimethylamine	83	83	48-113	1	30				
Di-n-octylphthalate	92	90	52-162	2	30				
Phenanthrene	90	90	29-142	0	30				
Pyrene	81	77	26-143	3	30				
Batch number: 13322B16A	Sample number(s): 7276996-7276998,7277000-7277001,7277004-7277006,7277008 UNSPK: 7276996								
11a TPH by EPA 8015B GRO	71	75	69-123	6	30				
Batch number: 133240014A	Sample number(s): 7276995-7276998,7277000-7277009 UNSPK: 7276996								
PCB-1016	103	103	41-135	1	50				
PCB-1260	114	116	40-134	3	50				
Batch number: 133230032A	Sample number(s): 7276995-7276998,7277000-7277009 UNSPK: 7276996								
EFH (C12-C14)	87	83	49-123	5	20				
EFH (C15-C20)	100	89	49-123	12	20				
EFH (C21-C30)	217*	89	49-123	84*	20				
EFH (C30-C40)	325*	79	49-123	122*	20				
EFH (C8-C11)	80	71	49-123	13	20				
Batch number: 133250637008	Sample number(s): 7276995-7277009 UNSPK: 7276996 BKG: 7276996								
Aluminum	1374 (2)	1420 (2)	75-125	0	20	19,200	18,700	3	20
Antimony	62*	64*	75-125	4	20	4.00 U	4.00 U	0 (1)	20
Arsenic	97	96	75-125	0	20	6.24	5.72	9 (1)	20
Barium	97	98	75-125	1	20	95.1	88.6	7	20
Beryllium	101	102	75-125	1	20	0.664 J	0.663 J	0 (1)	20
Boron	97	98	75-125	2	20	2.24 J	2.10 J	6 (1)	20
Cadmium	94	96	75-125	3	20	0.0930 J	1.00 U	200* (1)	20
Calcium	144 (2)	111 (2)	75-125	4	20	3,120	3,030	3	20
Chromium	98	105	75-125	3	20	22.4	22.7	1	20
Cobalt	95	95	75-125	0	20	6.09	6.42	5	20
Copper	100	103	75-125	2	20	11.0	10.5	5	20
Iron	-33 (2)	281 (2)	75-125	1	20	26,000	25,000	4	20
Lead	89	114	75-125	16	20	7.38	6.69	10 (1)	20
Lithium	101	100	75-125	1	20	29.3	27.6	6	20
Magnesium	192 (2)	182 (2)	75-125	0	20	5,580	5,540	1	20
Manganese	119 (2)	121 (2)	75-125	0	20	326	354	8	20
Molybdenum	93	93	75-125	0	20	0.427 J	0.304 J	34* (1)	20
Nickel	94	97	75-125	2	20	14.0	13.0	7	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phosphorus	101 (2)	95 (2)	75-125	1	20	434	422	3	20
Potassium	122	118	75-125	1	20	2,790	2,650	5	20
Sodium	99	96	75-125	2	20	95.5 J	92.4 J	3 (1)	20
Tin	86	87	75-125	1	20	3.07 J	2.89 J	6 (1)	20
Titanium	194 (2)	169 (2)	75-125	2	20	1,350	1,300	4	20
Vanadium	100	104	75-125	2	20	45.2	45.1	0	20
Zinc	97	103	75-125	3	20	58.7	56.8	3	20
Zirconium	94	94	75-125	1	20	4.49 J	4.53 J	1 (1)	20
Batch number: 133250637008A	Sample number(s): 7276995-7277009 UNSPK: 7276996 BKG: 7276996								
Silver	102	105	75-125	3	20	0.0380 J	0.0413 J	8 (1)	20
Strontium	125	135*	75-125	3	20	19.7	21.3	8	20
Thallium	103	112	75-125	5	20	0.290	0.292	1 (1)	20
Batch number: 133250637008B	Sample number(s): 7276995-7277009 UNSPK: 7276996 BKG: 7276996								
Selenium	106	105	75-125	1	20	0.188 J	0.115 J	48* (1)	20
Batch number: 133250638004	Sample number(s): 7276995-7277009 UNSPK: 7276996 BKG: 7276996								
3a Mercury 7471A	112	106	65-135	4	20	0.0163 U	0.0159 U	0 (1)	20
Batch number: 13318039402A	Sample number(s): 7276995-7276996,7276999-7277006 BKG: 7276996								
15a pH by 9045D						8.18	8.21	0	3
Batch number: 13318039402B	Sample number(s): 7277007-7277009 BKG: 7277008								
15a pH by 9045D						7.55	7.56	0	3
Batch number: 13323162402B	Sample number(s): 7276995-7277009 BKG: 7276996								
14a Moisture Content by 160.3						3.3	3.2	2	20
14a Moisture Content by 160.3						3.3	3.2	2	20
14a Moisture Content by 160.3						3.3	3.2	2	20
Batch number: 13325001	Sample number(s): 7276995-7276998,7277000-7277009 UNSPK: 7276996								
2378-TCDD	99	98	40-135	0	20				
12378-PeCDD	104	102	40-135	1	20				
123478-HxCDD	108	107	40-135	1	20				
123678-HxCDD	107	106	40-135	1	20				
123789-HxCDD	107	105	40-135	1	20				
1234678-HpCDD	97	95	40-135	1	20				
OCDD	66	65	40-135	1	20				
2378-TCDF	105	104	40-135	0	20				
12378-PeCDF	105	106	40-135	2	20				
23478-PeCDF	108	106	40-135	1	20				
123478-HxCDF	108	107	40-135	0	20				
123678-HxCDF	108	107	40-135	0	20				
123789-HxCDF	107	106	40-135	0	20				
234678-HxCDF	107	106	40-135	0	20				
1234678-HpCDF	103	104	40-135	2	20				
1234789-HpCDF	108	108	40-135	2	20				
OCDF	104	102	40-135	0	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13322SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7276995	94	84	99
7276996	91	81	95
7276997	95	89	101
7276998	96	87	100
7277000	91	82	95
7277001	99	90	103
7277002	89	80	97
7277003	93	83	101
7277004	90	83	95
7277005	94	86	98
7277006	91	81	92
7277007	77	68	83
7277008	84	75	94
7277009	80	83	100
Blank	95	88	102
LCS	97	89	99
MS	95	89	101
MSD	96	87	100
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13318B94A

	Trifluorotoluene-F
7277010	87
Blank	84
LCS	94
LCSD	93
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13322B16A

	Trifluorotoluene-F
7276996	91
7276997	83
7276998	87
7277000	86
7277001	92
7277004	81
7277005	89
7277006	84
7277008	88
Blank	109

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Quality Control Summary

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Surrogate Quality Control

LCS	104	
MS	83	
MSD	87	
Limits:	50-142	

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133240014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7276995	114	106
7276996	108	106
7276997	111	114
7276998	113	118
7277000	110	100
7277001	108	116
7277002	108	105
7277003	99	100
7277004	100	100
7277005	120	118
7277006	107	101
7277007	110	108
7277008	117	115
7277009	99	95
Blank	121*	124*
LCS	115	124*
LCSD	123*	128*
MS	111	114
MSD	113	118
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133230032A

	Chlorobenzene	Orthoterphenyl
7276995	88	88
7276996	95	95
7276997	94	92
7276998	88	88
7277000	86	86
7277001	100	99
7277002	84	84
7277003	82	82
7277004	92	89
7277005	89	87
7277006	91	88
7277007	79	79
7277008	87	85
7277009	84	82
Blank	95	92
LCS	93	92
MS	94	92
MSD	88	88
Limits:	37-125	66-123

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1433971
Reported: 12/03/13 at 11:38 AM

Surrogate Quality Control

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13325001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7276995	83	78	83	89	88	90
7276996	69	69	76	84	81	77
7276997	71	71	77	86	83	84
7276998	72	71	80	85	84	88
7277000	64	65	72	78	77	74
7277001	59	61	69	78	74	72
7277002	65	68	76	87	81	72
7277003	74	73	83	94	88	79
7277004	65	69	80	86	86	81
7277005	69	68	79	88	83	76
7277006	67	64	76	81	82	86
7277007	73	66	72	80	78	72
7277008	68	75	76	81	79	82
7277009	84	79	84	90	86	90
Blank	67	72	78	88	83	76
MS	71	71	77	86	83	84
MSD	72	71	80	85	84	88
OPR	65	61	70	77	75	72
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7276995	93	74	72	75	85	84
7276996	95	67	65	69	79	81
7276997	100	67	65	70	86	87
7276998	91	71	72	67	83	85
7277000	85	65	65	64	76	76
7277001	93	62	57	60	76	73
7277002	97	63	57	69	84	81
7277003	104	67	65	74	89	90
7277004	96	69	61	67	84	83
7277005	98	64	60	68	84	84
7277006	83	61	65	60	76	76
7277007	88	59	58	64	77	80
7277008	96	73	74	71	79	79
7277009	94	75	71	75	83	83
Blank	98	63	62	73	85	84
MS	100	67	65	70	86	87
MSD	91	71	72	67	83	85
OPR	89	60	60	64	77	77
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7276995	83	76	77	78	85
7276996	80	76	72	67	76
7276997	88	77	74	69	79
7276998	83	75	77	67	75
7277000	75	70	70	62	71

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Surrogate Quality Control

7277001	74	71	68	59	68
7277002	81	75	67	66	77
7277003	89	80	76	74	83
7277004	82	78	66	65	74
7277005	81	75	71	67	77
7277006	74	67	67	66	68
7277007	74	66	68	64	75
7277008	80	81	81	66	78
7277009	82	77	74	75	84
Blank	84	73	74	66	80
MS	88	77	74	69	79
MSD	83	75	77	67	75
OPR	76	73	71	59	69
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct# 413013 cp# 1433971 sample# 7276995-7010

JH 11/14/13

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/13/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131113-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-654-SA5A-SB-0.0-0.5	11/13/13 08:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-654-SA5A-SB-0.0-0.5	11/13/13 08:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-654-SA5A-SB-3.0-4.0MS	11/13/13 08:20	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-954-SA5A-SB-3.0-4.0	11/13/13 08:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-657-SA5A-SB-7.0-8.0	11/13/13 09:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-658-SA5A-SB-0.0-0.5	11/13/13 10:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-658-SA5A-SB-0.0-0.5	11/13/13 10:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-657-SA5A-SB-0.0-0.5	11/13/13 09:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-657-SA5A-SB-0.0-0.5	11/13/13 09:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-658-SA5A-SB-7.0-8.0	11/13/13 10:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-654-SA5A-SB-3.0-4.0MS	11/13/13 08:20	SO	None	6 - Encore	10 day																				X											
SL-954-SA5A-SB-3.0-4.0	11/13/13 08:25	SO	None	2 - Encore	10 day																				X											
SL-657-SA5A-SB-0.0-0.5	11/13/13 09:35	SO	None	2 - Encore	10 day																				X											
SL-658-SA5A-SB-0.0-0.5	11/13/13 10:35	SO	None	2 - Encore	10 day																				X											
SL-667-SA5A-SB-3.0-4.0	11/13/13 13:40	SO	None	2 - Encore	10 day																				X											
SL-657-SA5A-SB-4.0-5.0	11/13/13 14:20	SO	None	2 - Encore	10 day																				X											
SL-658-SA5A-SB-4.0-5.0	11/13/13 14:00	SO	None	2 - Encore	10 day																				X											

acct# 13013 Cap# 1433971 Sample# 7276995-7010

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/13/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131113-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/13/2013	1600									
										11/14/13	0915

acct# 13013 Gp# 1433971 sample# 7276995-7010

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/13/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131113-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-657-SA5A-SB-4.0-5.0	11/13/13 14:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-658-SA5A-SB-4.0-5.0	11/13/13 14:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-667-SA5A-SB-0.0-0.5	11/13/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-667-SA5A-SB-0.0-0.5	11/13/13 13:30	SO	None	1 - 4 oz glass	10 day													X																		
SL-667-SA5A-SB-3.0-4.0	11/13/13 13:40	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-670-SA5A-SB-0.0-0.5	11/13/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-670-SA5A-SB-0.0-0.5	11/13/13 12:50	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11.13.13	1600									
										11/14/13	0915

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdmsmith.com]
Sent: Tuesday, November 19, 2013 9:20 AM
To: Nicole Maljovec
Subject: RE: SSFL 11/13/2013 COC

yes, please test for TPH-GRO

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Monday, November 18, 2013 7:51 PM
To: Hartman, Pamela
Subject: RE: SSFL 11/13/2013 COC

Hi Pam,
We also received a trip blank, TB-111313 for the 11/13/13 samples (see below). Should we test for TPH-GRO?

Thanks,
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Hartman, Pamela [mailto:HartmanPM@cdmsmith.com]
Sent: Thursday, November 14, 2013 1:56 PM
To: Nicole Maljovec; Burgesser, Todd
Cc: Mysel, Stefanie; Begay, Nacolynn
Subject: RE: SSFL 11/13/2013 COC

Nicole

Sorry for the confusion. I will send a corrected COC in a minute.

1)There are no encores for these, they were put on the COC by mistake

SL-657-SA5A-SB-0.0-0.5 (9:35)
SL-658-SA5A-SB-0.0-0.5 (10:35)

2) SL-657-SA5A-SB-7.0-8.0 (9:50) is being added to the COC and should be run for TPH-GRO

3) SL-658-SA5A-SB-0.0-0.5 (10:35) should be SL-658-SA5A-7.0-8.0. I will add this as well

Thanks,
Pam

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, November 14, 2013 10:42 AM
To: Hartman, Pamela; Burgesser, Todd
Cc: Mysel, Stefanie; Begay, Nacolynn

Subject: RE: SSFL 11/13/2013 COC

Hi all,
We received encores for two samples that didn't have GRO requested and we're missing encores for two samples that have GRO requested.

Have Encores for:
SL-657-SA5A-SB-7.0-8.0 (9:50)
SL-658-SA5A-SB-0.0-0.5 (10:45)

Missing Encores for:
SL-657-SA5A-SB-0.0-0.5 (9:35)
SL-658-SA5A-SB-0.0-0.5 (10:35)

Do you think the encores were mislabeled and these actually belong to the 0.0-0.5 depth samples?

We also received a trip blank, TB-111313 (8:00) that wasn't listed on the COC as well. I'm going to assume you would like this tested for GRO. Please confirm.

Thanks!
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Hartman, Pamela [mailto:HartmanPM@cdmsmith.com]
Sent: Wednesday, November 13, 2013 7:08 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Mysel, Stefanie; Begay, Nacolynn; Hartman, Pamela
Subject: SSFL 11/13/2013 COC

Lancaster Labs,

We shipped 2 coolers to the lab today for delivery tomorrow. Samples were collected from subarea 5A. The airbill numbers for today shipment
are: 797153393699 and 797153393894. Attached is today's sample list and a copy of our 2 COCs. Let me know if you have any questions.

Thank you,

Nacolynn Tanielu

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

From: Begay, Nacolynn
Sent: Monday, November 11, 2013 4:31 PM
To: ssflship@lancasterlabs.com; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie; Begay, Nacolynn
Subject: RE: SSFL 10/07/2013 COC

Lancaster Labs,

1 cooler was shipped to your lab for delivery tomorrow. These samples are from today's sampling. Samples were collected from subarea 5A. The airbill number for today's shipment is 7971 3142 0820. Attached is an excel table with sample names, dates and

times from today's sampling and a copy of the COC. We will be sending 2 equipment blank tomorrow for delivery on Wednesday. We submitted Hex Cr. for soil. Let me know if you have any questions or issues.

Thank you,

Nacolynn Tanielu

Acct#13013 Cap#1433971 Sample#7276995-7010

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/13/2013
CarrierName: FedEx
AirbillNo: 797153393699

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131113-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Revised COC NUM 11/14/13

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-654-SA5A-SB-0.0-0.5	11/13/13 08:05	SO	None	1 - 4 oz glass	10 day													X																		
SL-654-SA5A-SB-0.0-0.5	11/13/13 08:05	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-654-SA5A-SB-3.0-4.0MS	11/13/13 08:20	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-954-SA5A-SB-3.0-4.0	11/13/13 08:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-657-SA5A-SB-7.0-8.0	11/13/13 09:50	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-658-SA5A-SB-0.0-0.5	11/13/13 10:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-658-SA5A-SB-0.0-0.5	11/13/13 10:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-657-SA5A-SB-0.0-0.5	11/13/13 09:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-657-SA5A-SB-0.0-0.5	11/13/13 09:35	SO	None	1 - 4 oz glass	10 day													X																		
SL-658-SA5A-SB-7.0-8.0	11/13/13 10:45	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-654-SA5A-SB-3.0-4.0MS	11/13/13 08:20	SO	None	6 - Encore	10 day																				X											
SL-954-SA5A-SB-3.0-4.0	11/13/13 08:25	SO	None	2 - Encore	10 day																				X											
SL-667-SA5A-SB-3.0-4.0	11/13/13 13:40	SO	None	2 - Encore	10 day																				X											
SL-657-SA5A-SB-4.0-5.0	11/13/13 14:20	SO	None	2 - Encore	10 day																				X											
SL-658-SA5A-SB-4.0-5.0	11/13/13 14:00	SO	None	2 - Encore	10 day																				X											
SL-657-SA5A-SB-7.0-8.0	11/13/13 09:50	SO	None	2 - Encore	10 day																				X											
SL-658-SA5A-SB-7.0-8.0	11/13/13 10:45	SO	None	2 - Encore	10 day																				X											

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G#1433971

Environmental Sample Administration
Receipt Documentation Log

Client/Project: COM Smith

Date of Receipt: 11/14/13

Time of Receipt: 0915

Source Code: 507

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.2	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 3

Paperwork Discrepancy/Unpacking Problems:

0935

did not receive encore samples for SL-657-SA5A-SB-0.0-0.5 @

received encore samples for SL-657-SA5A-SB-7.0-8.0 @ 0950 not on COC

received TB-111313 (3) @ 0800 not on COC

did not receive encore samples for SL-658-SA5A-SB-0.0-0.5 @ 1035

received encore samples for SL-658-SA5A-SB-7.0-8.0 @ 1045 not on COC

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/14/13 1120

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 12, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/15/2013
Group Number: 1434351
SDG: PH129
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-111413 Water	7279098
SL-508-SA5A-SB-0.0-0.5 Soil	7279099
SL-508-SA5A-SB-4.0-5.0 Soil	7279100
SL-508-SA5A-SB-9.0-10.0 Soil	7279101
SL-508-SA5A-SB-17.0-18.0 Soil	7279102
SL-508-SA5A-SB-21.0-22.0 Soil	7279103
SL-508-SA5A-SB-33.0-34.0 Soil	7279104
TB-111413 Water	7279105
SL-521-SA5A-SB-0.0-0.5 Soil	7279106
SL-521-SA5A-SB-9.0-10.0 Soil	7279107
SL-521-SA5A-SB-11.0-12.0 Soil	7279108
SL-521-SA5A-SB-11.0-12.0MS Soil	7279109
SL-521-SA5A-SB-11.0-12.0MSD Soil	7279110
SL-521-SA5A-SB-11.0-12.0SS Soil	7279111
SL-521-SA5A-SB-11.0-12.0IS Soil	7279112
SL-521-SA5A-SB-11.0-12.0PDS Soil	7279113
SL-521-SA5A-SB-11.0-12.0DUP Soil	7279114
SL-821-SA5A-SB-11.0-12.0 Soil	7279115
SL-521-SA5A-SB-14.0-15.0 Soil	7279116

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	2.0	U	2.0	0.5	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.052	U	0.052	0.010	1
12971	Acenaphthylene	208-96-8	0.052	U	0.052	0.010	1
12971	Anthracene	120-12-7	0.052	U	0.052	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.052	U	0.052	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.052	U	0.052	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.052	U	0.052	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.052	U	0.052	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.052	U	0.052	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.052	U	0.052	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.052	1
12971	Di-n-butylphthalate	84-74-2	0.21	J	1.0	0.052	1
12971	Chrysene	218-01-9	0.052	U	0.052	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.052	U	0.052	0.010	1
12971	Diethylphthalate	84-66-2	0.29	J	1.0	0.052	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.052	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.52	J	1.0	0.052	1
12971	Fluoranthene	206-44-0	0.052	U	0.052	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Fluorene	86-73-7	0.052	U	0.052	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.052	U	0.052	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.052	U	0.052	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.052	U	0.052	0.010	1
12971	Morpholine	110-91-8	20	U	20	20	1
12971	Naphthalene	91-20-3	0.052	U	0.052	0.031	1
12971	N-Nitrosodimethylamine	62-75-9	0.052	U	0.052	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.052	1
12971	Phenanthrene	85-01-8	0.052	U	0.052	0.031	1
12971	Pyrene	129-00-0	0.052	U	0.052	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Aldehydes & Ketones	**SW-846 8315A**		ug/l		ug/l	ug/l	
13022	Formaldehyde	50-00-0	50	U	50	30	1
	The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. The following corrective action was taken: The analysis was repeated and the continuing calibration verification standard bracketing the sample on the second trial is within specification. The first trial result is reported because it was analyzed within the holding time. Similar results were obtained.						
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0080	U	0.0080	0.0016	1
10589	Alpha BHC	319-84-6	0.0080	U	0.0080	0.0024	1
10589	Beta BHC	319-85-7	0.0037	J	0.0080	0.0027	1
10589	Gamma BHC - Lindane	58-89-9	0.0080	U	0.0080	0.0016	1
10589	Chlordane	57-74-9	0.40	U	0.40	0.13	1
10589	p,p-DDD	72-54-8	0.016	U	0.016	0.0040	1
10589	p,p-DDE	72-55-9	0.016	U	0.016	0.0040	1
10589	p,p-DDT	50-29-3	0.016	U	0.016	0.0042	1
10589	Delta BHC	319-86-8	0.0080	U	0.0080	0.0027	1
10589	Dieldrin	60-57-1	0.016	U	0.016	0.0042	1
10589	Endosulfan I	959-98-8	0.0080	U	0.0080	0.0034	1
10589	Endosulfan II	33213-65-9	0.016	U	0.016	0.012	1
10589	Endosulfan Sulfate	1031-07-8	0.016	U	0.016	0.0046	1
10589	Endrin	72-20-8	0.016	U	0.016	0.0065	1
10589	Endrin Aldehyde	7421-93-4	0.080	U	0.080	0.016	1
10589	Endrin Ketone	53494-70-5	0.016	U	0.016	0.0040	1
10589	Heptachlor	76-44-8	0.0080	U	0.0080	0.0016	1
10589	Heptachlor Epoxide	1024-57-3	0.0080	U	0.0080	0.0018	1
10589	Methoxychlor	72-43-5	0.080	U	0.080	0.024	1
10589	Mirex	2385-85-5	0.040	U	0.040	0.0080	1
10589	Toxaphene	8001-35-2	0.80	U	0.80	0.24	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.40	U	0.40	0.080	1
13092	Aroclor 5442	12642-23-8	0.40	U	0.40	0.080	1
13092	Aroclor 5460	11126-42-4	0.40	U	0.40	0.088	1
13092	PCB-1016	12674-11-2	0.40	U	0.40	0.080	1
13092	PCB-1221	11104-28-2	0.40	U	0.40	0.080	1
13092	PCB-1232	11141-16-5	0.40	U	0.40	0.16	1
13092	PCB-1242	53469-21-9	0.40	U	0.40	0.080	1
13092	PCB-1248	12672-29-6	0.40	U	0.40	0.080	1
13092	PCB-1254	11097-69-1	0.40	U	0.40	0.080	1
13092	PCB-1260	11096-82-5	0.40	U	0.40	0.12	1
13092	PCB-1262	37324-23-5	0.40	U	0.40	0.16	1
13092	PCB-1268	11100-14-4	0.40	U	0.40	0.13	1
GC Miscellaneous	**SW-846 8015C Feb 2007 Rev 3**		**ug/l**		**ug/l**	**ug/l**	
10603	Ethanol	64-17-5	1,000	U	1,000	200	1
10603	Isopropanol	67-63-0	1,000	U	1,000	200	1
10603	Methanol	67-56-1	1,000	U	1,000	200	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C15-C20)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C21-C30)	n.a.	0.099	U	0.099	0.049	1
10365	EFH (C30 - C40)	n.a.	0.49	U	0.49	0.099	1
10365	EFH (C8-C11)	n.a.	0.099	U	0.099	0.049	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400	U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100	U	0.0100	0.00083	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.7	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.96	U	1.96	0.410	1
10915	12378-PeCDD	40321-76-4	0.426	JBQ	9.78	0.397	1
10915	123478-HxCDD	39227-28-6	0.291	JBQ	9.78	0.242	1
10915	123678-HxCDD	57653-85-7	0.578	J	9.78	0.265	1
10915	123789-HxCDD	19408-74-3	0.691	JB	9.78	0.252	1
10915	1234678-HpCDD	35822-46-9	0.636	JB	9.78	0.353	1
10915	OCDD	3268-87-9	2.00	JBQ	19.6	0.530	1
10915	2378-TCDF	51207-31-9	0.366	J	1.96	0.306	1
10915	12378-PeCDF	57117-41-6	0.594	JBQ	9.78	0.251	1
10915	23478-PeCDF	57117-31-4	0.500	JBQ	9.78	0.235	1
10915	123478-HxCDF	70648-26-9	0.706	JBQ	9.78	0.189	1
10915	123678-HxCDF	57117-44-9	0.519	JB	9.78	0.192	1
10915	123789-HxCDF	72918-21-9	0.649	JBQ	9.78	0.219	1
10915	234678-HxCDF	60851-34-5	0.510	JBQ	9.78	0.189	1
10915	1234678-HpCDF	67562-39-4	0.485	JB	9.78	0.127	1
10915	1234789-HpCDF	55673-89-7	0.576	JBQ	9.78	0.174	1
10915	OCDF	39001-02-0	1.70	JBQ	19.6	0.572	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.227				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	49	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	51	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y133301AA	11/26/2013 21:47	Kevin A Sposito	1
00527	13b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133241AA	11/20/2013 11:59	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E133241AA	11/20/2013 11:59	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y133301AA	11/26/2013 21:47	Kevin A Sposito	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13322WAA026	12/03/2013 13:40	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13322WAA026	11/18/2013 15:00	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/22/2013 01:37	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/22/2013 01:37	Marie D Beamenderfer	1
13022	19b Formaldehyde 8315A	SW-846 8315A	1	133200003A	11/18/2013 22:26	Jessica L Miller	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	133220007A	11/19/2013 20:17	Jamie L Brillhart	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133220008A	11/20/2013 15:10	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133220008A	11/18/2013 15:00	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	133220007A	11/18/2013 15:00	Seth A Farrier	1
01013	Formaldehyde Extraction	SW-846 8315A	1	133200003A	11/16/2013 14:30	David V Hershey Jr	1
10603	14b Alcohols by EPA 8015C	SW-846 8015C Feb 2007 Rev 3	1	133230036A	11/19/2013 20:07	Elizabeth J Marin	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133220028A	11/19/2013 16:37	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133220028A	11/19/2013 02:30	Sherry L Morrow	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13329002	11/27/2013 13:04	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13329002	11/25/2013 12:00	Brett M Weidman	1
01743	Aluminum	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07044	Antimony	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07035	Arsenic	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07046	Barium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07047	Beryllium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
08014	Boron	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07049	Cadmium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
01750	Calcium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07051	Chromium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07052	Cobalt	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07053	Copper	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279098
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 15:30

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2901 SDG#: PH129-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07055	Lead	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
01756	Lithium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
01757	Magnesium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07058	Manganese	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07060	Molybdenum	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07061	Nickel	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
01762	Potassium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
01767	Sodium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07069	Tin	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07070	Titanium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07071	Vanadium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
07072	Zinc	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
10144	Zirconium	SW-846 6010C	1	133240635002	11/22/2013 00:31	John W Yanzuk II	1
06041	Selenium	SW-846 6020A	1	133240639002B	11/22/2013 22:24	John P Hook	1
06042	Silver	SW-846 6020A	1	133240639002A	11/22/2013 22:24	John P Hook	1
06044	Strontium	SW-846 6020A	1	133240639002A	11/22/2013 22:24	John P Hook	1
06045	Thallium	SW-846 6020A	1	133240639002A	11/22/2013 22:24	John P Hook	1
00259	3b Mercury 7470A	SW-846 7470A	1	133255713006	11/22/2013 06:39	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133240635002	11/21/2013 11:55	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133240639002	11/21/2013 12:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133245713003	11/20/2013 16:45	Nelli S Markaryan	1
05713	WW SW846 Hg Digest	SW-846 7470A	2	133255713006	11/21/2013 16:40	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13319987301B	11/15/2013 15:03	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13320121521A	11/16/2013 14:20	Noah M Rainbow	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	18	U	18	7.1	10
12969	Acenaphthylene	208-96-8	18	U	18	3.6	10
12969	Anthracene	120-12-7	18	U	18	3.6	10
12969	Benzo(a)anthracene	56-55-3	13	J	18	7.1	10
12969	Benzo(a)pyrene	50-32-8	20		18	7.1	10
12969	Benzo(b)fluoranthene	205-99-2	37		18	7.1	10
12969	Benzo(e)pyrene	192-97-2	180	U	180	36	10
12969	Benzo(g,h,i)perylene	191-24-2	15	J	18	7.1	10
12969	Benzo(k)fluoranthene	207-08-9	18	U	18	7.1	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	64	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	64	10
12969	Chrysene	218-01-9	28		18	3.6	10
12969	Dibenz(a,h)anthracene	53-70-3	7.9	J	18	7.1	10
12969	Diethylphthalate	84-66-2	190	U	190	64	10
12969	Dimethylphthalate	131-11-3	190	U	190	64	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	64	10
12969	Fluoranthene	206-44-0	18	U	18	7.1	10
12969	Fluorene	86-73-7	18	U	18	7.1	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	7.1	10
12969	1-Methylnaphthalene	90-12-0	18	U	18	7.1	10
12969	2-Methylnaphthalene	91-57-6	18	U	18	7.1	10
12969	Naphthalene	91-20-3	18	U	18	7.1	10
12969	N-Nitrosodimethylamine	62-75-9	18	U	18	7.1	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	64	10
12969	Phenanthrene	85-01-8	18	J	18	7.1	10
12969	Pyrene	129-00-0	13	J	18	7.1	10

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	27	U	27	11	5
12952	EFH (C15-C20)	n.a.	27	U	27	11	5
12952	EFH (C21-C30)	n.a.	110		27	11	5
12952	EFH (C30-C40)	n.a.	240		54	22	5
12952	EFH (C8-C11)	n.a.	27	U	27	11	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,400		41.8	7.54	1
06944	Antimony	7440-36-0	4.18	U	4.18	0.774	1
06935	Arsenic	7440-38-2	4.23		4.18	0.732	1
06946	Barium	7440-39-3	78.7		1.05	0.0345	1
06947	Beryllium	7440-41-7	0.502	J	1.05	0.0701	1
07914	Boron	7440-42-8	2.33	J	10.5	0.879	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0795	1
01650	Calcium	7440-70-2	2,640		20.9	3.49	1
06951	Chromium	7440-47-3	15.4		3.14	0.167	1
06952	Cobalt	7440-48-4	4.75		1.05	0.104	1
06953	Copper	7440-50-8	7.79		2.09	0.303	1
01654	Iron	7439-89-6	19,400		41.8	3.79	1
06955	Lead	7439-92-1	6.58		3.14	0.523	1
01656	Lithium	7439-93-2	25.5		4.2	0.36	1
01657	Magnesium	7439-95-4	4,430		10.5	1.75	1
06958	Manganese	7439-96-5	266		1.05	0.0868	1
06960	Molybdenum	7439-98-7	0.339	J	2.09	0.178	1
06961	Nickel	7440-02-0	8.95		2.09	0.136	1
10145	Phosphorus	7723-14-0	349		10.5	3.02	1
01662	Potassium	7440-09-7	3,080		105	8.73	1
01667	Sodium	7440-23-5	89.6	J	105	17.5	1
06969	Tin	7440-31-5	2.90	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,090		1.05	0.178	1
06971	Vanadium	7440-62-2	30.8		1.05	0.136	1
06972	Zinc	7440-66-6	62.2		4.18	0.209	1
10146	Zirconium	7440-67-7	2.83	J	5.23	0.879	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.131	J	0.418	0.105	2
06142	Silver	7440-22-4	0.0318	J	0.209	0.0272	2
06144	Strontium	7440-24-6	13.0		0.418	0.0711	2
06145	Thallium	7440-28-0	0.252		0.209	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0148	J	0.0174	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.73		0.0100	0.0100	1
	The pH was measured in water at 19.1 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	7.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0518	1
11031	12378-PeCDD	40321-76-4	0.0790	JB	5.29	0.0434	1
11031	123478-HxCDD	39227-28-6	0.0867	JBQ	5.29	0.0371	1
11031	123678-HxCDD	57653-85-7	0.155	JBQ	5.29	0.0379	1
11031	123789-HxCDD	19408-74-3	0.170	JB	5.29	0.0371	1
11031	1234678-HpCDD	35822-46-9	2.71	JB	5.29	0.0502	1
11031	OCDD	3268-87-9	25.3	B	10.6	0.0652	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0421	1
11031	12378-PeCDF	57117-41-6	0.197	JBQ	5.29	0.0274	1
11031	23478-PeCDF	57117-31-4	0.155	JBQ	5.29	0.0245	1
11031	123478-HxCDF	70648-26-9	0.0833	JBQ	5.29	0.0296	1
11031	123678-HxCDF	57117-44-9	0.131	JB	5.29	0.0320	1
11031	123789-HxCDF	72918-21-9	0.0869	JBQ	5.29	0.0337	1
11031	234678-HxCDF	60851-34-5	0.101	JBQ	5.29	0.0300	1
11031	1234678-HpCDF	67562-39-4	0.470	JB	5.29	0.0371	1
11031	1234789-HpCDF	55673-89-7	0.124	JBQ	5.29	0.0398	1
11031	OCDF	39001-02-0	1.00	JBQ	10.6	0.103	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.149				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	44	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	41	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	12/04/2013 15:15	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 01:57	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 12:20	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 16:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 12:53	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:36	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:36	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:36	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:36	John P Hook	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279099
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2902 SDG#: PH129-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 09:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	18	U	18	7.2	10
12969	Acenaphthylene	208-96-8	18	U	18	3.6	10
12969	Anthracene	120-12-7	3.8	J	18	3.6	10
12969	Benzo(a)anthracene	56-55-3	32		18	7.2	10
12969	Benzo(a)pyrene	50-32-8	28		18	7.2	10
12969	Benzo(b)fluoranthene	205-99-2	130		18	7.2	10
12969	Benzo(e)pyrene	192-97-2	100	J	180	36	10
12969	Benzo(g,h,i)perylene	191-24-2	23		18	7.2	10
12969	Benzo(k)fluoranthene	207-08-9	18	U	18	7.2	10
12969	Butylbenzylphthalate	85-68-7	190	U	190	64	10
12969	Di-n-butylphthalate	84-74-2	190	U	190	64	10
12969	Chrysene	218-01-9	130		18	3.6	10
12969	Dibenz(a,h)anthracene	53-70-3	13	J	18	7.2	10
12969	Diethylphthalate	84-66-2	190	U	190	64	10
12969	Dimethylphthalate	131-11-3	190	U	190	64	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	190	U	190	64	10
12969	Fluoranthene	206-44-0	17	J	18	7.2	10
12969	Fluorene	86-73-7	18	U	18	7.2	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	9.8	J	18	7.2	10
12969	1-Methylnaphthalene	90-12-0	12	J	18	7.2	10
12969	2-Methylnaphthalene	91-57-6	16	J	18	7.2	10
12969	Naphthalene	91-20-3	18	U	18	7.2	10
12969	N-Nitrosodimethylamine	62-75-9	18	U	18	7.2	10
12969	Di-n-octylphthalate	117-84-0	190	U	190	64	10
12969	Phenanthrene	85-01-8	53		18	7.2	10
12969	Pyrene	129-00-0	31		18	7.2	10

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	3.4	J	11	2.1	247.52
	Reporting limits were raised due to sample foaming.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	8.0	J	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	270	U	270	110	50
12952	EFH (C15-C20)	n.a.	270	U	270	110	50
12952	EFH (C21-C30)	n.a.	700		270	110	50
12952	EFH (C30-C40)	n.a.	2,200		540	220	50
12952	EFH (C8-C11)	n.a.	270	U	270	110	50
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,900		43.2	7.79	1
06944	Antimony	7440-36-0	4.32	U	4.32	0.799	1
06935	Arsenic	7440-38-2	5.14		4.32	0.756	1
06946	Barium	7440-39-3	87.6		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.454	J	1.08	0.0724	1
07914	Boron	7440-42-8	2.62	J	10.8	0.907	1
06949	Cadmium	7440-43-9	0.113	J	1.08	0.0821	1
01650	Calcium	7440-70-2	3,610		21.6	3.61	1
06951	Chromium	7440-47-3	17.7		3.24	0.173	1
06952	Cobalt	7440-48-4	5.04		1.08	0.107	1
06953	Copper	7440-50-8	9.40		2.16	0.313	1
01654	Iron	7439-89-6	22,800		43.2	3.91	1
06955	Lead	7439-92-1	14.3		3.24	0.540	1
01656	Lithium	7439-93-2	22.9		4.3	0.37	1
01657	Magnesium	7439-95-4	4,520		10.8	1.80	1
06958	Manganese	7439-96-5	275		1.08	0.0896	1
06960	Molybdenum	7439-98-7	1.26	J	2.16	0.184	1
06961	Nickel	7440-02-0	10.2		2.16	0.140	1
10145	Phosphorus	7723-14-0	416		10.8	3.12	1
01662	Potassium	7440-09-7	3,040		108	9.01	1
01667	Sodium	7440-23-5	148		108	18.0	1
06969	Tin	7440-31-5	2.88	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,090		1.08	0.184	1
06971	Vanadium	7440-62-2	33.8		1.08	0.140	1
06972	Zinc	7440-66-6	691		4.32	0.216	1
10146	Zirconium	7440-67-7	4.31	J	5.40	0.907	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.151	J	0.432	0.108	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06142	Silver	7440-22-4	0.0404 J	0.216	0.0281	2
06144	Strontium	7440-24-6	20.1	0.432	0.0734	2
06145	Thallium	7440-28-0	0.225	0.216	0.0324	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0169 U	0.0169	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.39	0.0100	0.0100	1
	The pH was measured in water at 19.6 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0510	1
11031	12378-PeCDD	40321-76-4	0.167	JBQ	5.33	0.0660	1
11031	123478-HxCDD	39227-28-6	0.0750	JB	5.33	0.0522	1
11031	123678-HxCDD	57653-85-7	0.147	JBQ	5.33	0.0564	1
11031	123789-HxCDD	19408-74-3	0.139	JBQ	5.33	0.0592	1
11031	1234678-HpCDD	35822-46-9	1.47	JB	5.33	0.0930	1
11031	OCDD	3268-87-9	12.3	B	10.7	0.129	1
11031	2378-TCDF	51207-31-9	0.0870	J	1.07	0.0567	1
11031	12378-PeCDF	57117-41-6	0.160	JBQ	5.33	0.0381	1
11031	23478-PeCDF	57117-31-4	0.275	JBQ	5.33	0.0322	1
11031	123478-HxCDF	70648-26-9	0.250	JBQ	5.33	0.0538	1
11031	123678-HxCDF	57117-44-9	0.300	JB	5.33	0.0505	1
11031	123789-HxCDF	72918-21-9	5.33	U	5.33	0.0612	1
11031	234678-HxCDF	60851-34-5	0.0899	JBQ	5.33	0.0570	1
11031	1234678-HpCDF	67562-39-4	0.387	JB	5.33	0.0490	1
11031	1234789-HpCDF	55673-89-7	0.261	JBQ	5.33	0.0660	1
11031	OCDF	39001-02-0	1.07	JB	10.7	0.248	1

A retention time shift was experienced for the 13C12-123468-HxCDD internal standard. The retention times have been adjusted to account for the internal standard shift. The data quality is not impacted by this result.

D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0688				1

A retention time shift was experienced for the 13C12-123468-HxCDD internal standard. The retention times have been adjusted to account for the internal standard shift. The data quality is not impacted by this result.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	55	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	46	23 - 140
13C12-OCDD	22	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	54	28 - 143
13C12-1234789-HpCDF	41	26 - 138
13C12-OCDF	20	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	11/27/2013 00:39	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 14:01	Laura M Krieger	247.52
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:46	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:46	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 02:16	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 12:41	Heather E Williams	50
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/26/2013 21:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 12:57	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279100
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:47

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2903 SDG#: PH129-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:39	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:39	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:39	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:39	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 09:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.47	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	0.74	J	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.8	0.73	1
12969	Naphthalene	91-20-3	1.6	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.0	J	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
naphthalene, 2-methylnaphthalene, 1-methylnaphthalene and phenanthrene were not detected in the re-extraction
Benzo(b)fluoranthene was detected in the re-extraction

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.19
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	J	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300		43.9	7.91	1
06944	Antimony	7440-36-0	4.39	U	4.39	0.812	1
06935	Arsenic	7440-38-2	6.06		4.39	0.768	1
06946	Barium	7440-39-3	78.0		1.10	0.0362	1
06947	Beryllium	7440-41-7	0.513	J	1.10	0.0735	1
07914	Boron	7440-42-8	2.38	J	11.0	0.922	1
06949	Cadmium	7440-43-9	1.10	U	1.10	0.0834	1
01650	Calcium	7440-70-2	7,570		22.0	3.67	1
06951	Chromium	7440-47-3	19.5		3.29	0.176	1
06952	Cobalt	7440-48-4	4.84		1.10	0.109	1
06953	Copper	7440-50-8	9.27		2.20	0.318	1
01654	Iron	7439-89-6	19,400		43.9	3.97	1
06955	Lead	7439-92-1	6.02		3.29	0.549	1
01656	Lithium	7439-93-2	26.1		4.4	0.37	1
01657	Magnesium	7439-95-4	5,050		11.0	1.83	1
06958	Manganese	7439-96-5	327		1.10	0.0911	1
06960	Molybdenum	7439-98-7	0.510	J	2.20	0.187	1
06961	Nickel	7440-02-0	9.99		2.20	0.143	1
10145	Phosphorus	7723-14-0	366		11.0	3.17	1
01662	Potassium	7440-09-7	2,820		110	9.15	1
01667	Sodium	7440-23-5	135		110	18.3	1
06969	Tin	7440-31-5	3.01	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,200		1.10	0.187	1
06971	Vanadium	7440-62-2	34.2		1.10	0.143	1
06972	Zinc	7440-66-6	53.2		4.39	0.220	1
10146	Zirconium	7440-67-7	2.81	J	5.49	0.922	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.314	J	0.439	0.110	2
06142	Silver	7440-22-4	0.0687	J	0.220	0.0285	2
06144	Strontium	7440-24-6	15.7		0.439	0.0746	2
06145	Thallium	7440-28-0	0.249		0.220	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 19.6 C.	n.a.	7.40	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	8.9	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.233	JQ	1.09	0.186	1
11031	12378-PeCDD	40321-76-4	0.447	JB	5.44	0.224	1
11031	123478-HxCDD	39227-28-6	0.277	JBQ	5.44	0.162	1
11031	123678-HxCDD	57653-85-7	0.283	JBQ	5.44	0.171	1
11031	123789-HxCDD	19408-74-3	0.291	JBQ	5.44	0.169	1
11031	1234678-HpCDD	35822-46-9	0.523	JBQ	5.44	0.203	1
11031	OCDD	3268-87-9	3.82	JBQ	10.9	0.182	1
11031	2378-TCDF	51207-31-9	0.204	JQ	1.09	0.143	1
11031	12378-PeCDF	57117-41-6	0.319	JBQ	5.44	0.115	1
11031	23478-PeCDF	57117-31-4	0.378	JB	5.44	0.112	1
11031	123478-HxCDF	70648-26-9	0.298	JBQ	5.44	0.117	1
11031	123678-HxCDF	57117-44-9	0.172	JB	5.44	0.115	1
11031	123789-HxCDF	72918-21-9	0.368	JBQ	5.44	0.120	1
11031	234678-HxCDF	60851-34-5	0.258	JBQ	5.44	0.102	1
11031	1234678-HpCDF	67562-39-4	0.477	JBQ	5.44	0.111	1
11031	1234789-HpCDF	55673-89-7	5.44	U	5.44	0.139	1
11031	OCDF	39001-02-0	0.533	JB	10.9	0.201	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.577				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	39	25 - 164
13C12-12378-PeCDD	40	25 - 181
13C12-123478-HxCDD	47	32 - 141
13C12-123678-HxCDD	46	28 - 130
13C12-123789-HxCDD	44	28 - 130
13C12-1234678-HpCDD	42	23 - 140
13C12-OCDD	42	17 - 157
13C12-2378-TCDF	38	24 - 169
13C12-12378-PeCDF	41	24 - 185
13C12-23478-PeCDF	39	21 - 178
13C12-123478-HxCDF	43	26 - 152
13C12-123678-HxCDF	44	26 - 123
13C12-234678-HxCDF	47	28 - 136
13C12-123789-HxCDF	44	29 - 147
13C12-1234678-HpCDF	47	28 - 143
13C12-1234789-HpCDF	41	26 - 138
13C12-OCDF	39	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 19:52	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 07:43	Laura M Krieger	23.19
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:47	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:47	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 02:34	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 11:16	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/26/2013 22:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279101
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:55

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2904 SDG#: PH129-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:46	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:46	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:46	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:46	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 09:57	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	0.92	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.39	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.6	J	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	0.91	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.4	J	1.8	0.73	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
naphthalene and chrysene were not detected in the re-extraction

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.13
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.8		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	9.8	J	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		43.6	7.86	1
06944	Antimony	7440-36-0	4.36	U	4.36	0.807	1
06935	Arsenic	7440-38-2	4.78		4.36	0.763	1
06946	Barium	7440-39-3	89.5		1.09	0.0360	1
06947	Beryllium	7440-41-7	0.619	J	1.09	0.0731	1
07914	Boron	7440-42-8	3.21	J	10.9	0.916	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0829	1
01650	Calcium	7440-70-2	2,360		21.8	3.64	1
06951	Chromium	7440-47-3	15.1		3.27	0.174	1
06952	Cobalt	7440-48-4	4.79		1.09	0.108	1
06953	Copper	7440-50-8	7.72		2.18	0.316	1
01654	Iron	7439-89-6	19,200		43.6	3.95	1
06955	Lead	7439-92-1	6.47		3.27	0.545	1
01656	Lithium	7439-93-2	25.6		4.4	0.37	1
01657	Magnesium	7439-95-4	4,190		10.9	1.82	1
06958	Manganese	7439-96-5	266		1.09	0.0905	1
06960	Molybdenum	7439-98-7	0.196	J	2.18	0.185	1
06961	Nickel	7440-02-0	9.03		2.18	0.142	1
10145	Phosphorus	7723-14-0	325		10.9	3.15	1
01662	Potassium	7440-09-7	3,070		109	9.09	1
01667	Sodium	7440-23-5	138		109	18.2	1
06969	Tin	7440-31-5	3.04	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,150		1.09	0.185	1
06971	Vanadium	7440-62-2	31.8		1.09	0.142	1
06972	Zinc	7440-66-6	54.4		4.36	0.218	1
10146	Zirconium	7440-67-7	3.08	J	5.45	0.916	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.161	J	0.436	0.109	2
06142	Silver	7440-22-4	0.0362	J	0.218	0.0284	2
06144	Strontium	7440-24-6	18.8		0.436	0.0741	2
06145	Thallium	7440-28-0	0.284		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 20.3 C.	n.a.	7.71	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	9.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0683	1
11031	12378-PeCDD	40321-76-4	5.39	U	5.39	0.0566	1
11031	123478-HxCDD	39227-28-6	0.131	JBQ	5.39	0.0587	1
11031	123678-HxCDD	57653-85-7	0.182	JB	5.39	0.0604	1
11031	123789-HxCDD	19408-74-3	0.142	JBQ	5.39	0.0591	1
11031	1234678-HpCDD	35822-46-9	2.81	JB	5.39	0.0874	1
11031	OCDD	3268-87-9	50.1	B	10.8	0.0838	1
11031	2378-TCDF	51207-31-9	1.08	U	1.08	0.0586	1
11031	12378-PeCDF	57117-41-6	0.0978	JBQ	5.39	0.0314	1
11031	23478-PeCDF	57117-31-4	0.0871	JBQ	5.39	0.0311	1
11031	123478-HxCDF	70648-26-9	0.185	JB	5.39	0.0382	1
11031	123678-HxCDF	57117-44-9	0.0775	JBQ	5.39	0.0379	1
11031	123789-HxCDF	72918-21-9	0.299	JB	5.39	0.0441	1
11031	234678-HxCDF	60851-34-5	0.128	JB	5.39	0.0377	1
11031	1234678-HpCDF	67562-39-4	0.643	JB	5.39	0.0423	1
11031	1234789-HpCDF	55673-89-7	0.211	JBQ	5.39	0.0589	1
11031	OCDF	39001-02-0	1.30	JB	10.8	0.0878	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.129				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 20:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 08:21	Laura M Krieger	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:48	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:48	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 02:52	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 10:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/26/2013 23:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-17.0-18.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279102
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:02

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2905 SDG#: PH129-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:48	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:48	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:48	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:48	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 09:59	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	0.88	J	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.0	J	1.9	0.74	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	0.77	J	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
phenanthrene and fluoranthene were not detected in the re-extraction

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.72
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C21-C30)	n.a.	5.6	U	5.6	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		43.8	7.89	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	5.02		4.38	0.766	1
06946	Barium	7440-39-3	103		1.09	0.0361	1
06947	Beryllium	7440-41-7	0.632	J	1.09	0.0733	1
07914	Boron	7440-42-8	3.35	J	10.9	0.919	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0832	1
01650	Calcium	7440-70-2	3,590		21.9	3.66	1
06951	Chromium	7440-47-3	18.1		3.28	0.175	1
06952	Cobalt	7440-48-4	5.88		1.09	0.108	1
06953	Copper	7440-50-8	9.73		2.19	0.317	1
01654	Iron	7439-89-6	21,200		43.8	3.96	1
06955	Lead	7439-92-1	6.39		3.28	0.547	1
01656	Lithium	7439-93-2	27.0		4.4	0.37	1
01657	Magnesium	7439-95-4	4,820		10.9	1.83	1
06958	Manganese	7439-96-5	301		1.09	0.0908	1
06960	Molybdenum	7439-98-7	0.311	J	2.19	0.186	1
06961	Nickel	7440-02-0	11.2		2.19	0.142	1
10145	Phosphorus	7723-14-0	363		10.9	3.16	1
01662	Potassium	7440-09-7	3,250		109	9.13	1
01667	Sodium	7440-23-5	147		109	18.3	1
06969	Tin	7440-31-5	3.06	J	10.9	0.241	1
06970	Titanium	7440-32-6	1,160		1.09	0.186	1
06971	Vanadium	7440-62-2	35.3		1.09	0.142	1
06972	Zinc	7440-66-6	59.0		4.38	0.219	1
10146	Zirconium	7440-67-7	3.71	J	5.47	0.919	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.155	J	0.438	0.109	2
06142	Silver	7440-22-4	0.0346	J	0.219	0.0285	2
06144	Strontium	7440-24-6	19.6		0.438	0.0744	2
06145	Thallium	7440-28-0	0.286		0.219	0.0328	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0185	U	0.0185	0.0111	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	8.05	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0725	1
11031	12378-PeCDD	40321-76-4	0.0973	JBQ	5.37	0.0809	1
11031	123478-HxCDD	39227-28-6	0.124	JB	5.37	0.0680	1
11031	123678-HxCDD	57653-85-7	0.241	JBQ	5.37	0.0708	1
11031	123789-HxCDD	19408-74-3	0.214	JBQ	5.37	0.0649	1
11031	1234678-HpCDD	35822-46-9	1.02	JBQ	5.37	0.0995	1
11031	OCDD	3268-87-9	7.70	JB	10.7	0.0933	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0675	1
11031	12378-PeCDF	57117-41-6	0.150	JBQ	5.37	0.0459	1
11031	23478-PeCDF	57117-31-4	0.0664	JB	5.37	0.0419	1
11031	123478-HxCDF	70648-26-9	0.170	JBQ	5.37	0.0508	1
11031	123678-HxCDF	57117-44-9	0.116	JBQ	5.37	0.0449	1
11031	123789-HxCDF	72918-21-9	0.249	JBQ	5.37	0.0489	1
11031	234678-HxCDF	60851-34-5	0.0613	JBQ	5.37	0.0481	1
11031	1234678-HpCDF	67562-39-4	0.224	JB	5.37	0.0410	1
11031	1234789-HpCDF	55673-89-7	0.128	JBQ	5.37	0.0714	1
11031	OCDF	39001-02-0	0.506	JBQ	10.7	0.115	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0369				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	46	25 - 164
13C12-12378-PeCDD	36	25 - 181
13C12-123478-HxCDD	39	32 - 141
13C12-123678-HxCDD	38	28 - 130
13C12-123789-HxCDD	38	28 - 130
13C12-1234678-HpCDD	33	23 - 140
13C12-OCDD	33	17 - 157
13C12-2378-TCDF	37	24 - 169
13C12-12378-PeCDF	37	24 - 185
13C12-23478-PeCDF	37	21 - 178
13C12-123478-HxCDF	36	26 - 152
13C12-123678-HxCDF	38	26 - 123
13C12-234678-HxCDF	37	28 - 136
13C12-123789-HxCDF	41	29 - 147
13C12-1234678-HpCDF	42	28 - 143
13C12-1234789-HpCDF	27	26 - 138
13C12-OCDF	25	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 20:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 08:59	Laura M Krieger	23.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:49	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:49	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 03:11	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 08:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 00:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:56	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-21.0-22.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279103
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 10:09

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2906 SDG#: PH129-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:50	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:50	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:50	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:50	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:01	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.75	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.75	1
12969	Benzo(a)pyrene	50-32-8	0.77	J	1.9	0.75	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.9	0.75	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	0.81	J	1.9	0.75	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.75	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	0.73	J	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.75	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.75	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.75	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.75	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.75	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.75	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.75	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.75	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.75	1
12969	Pyrene	129-00-0	1.4	J	1.9	0.75	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
chrysene, benzo(a)pyrene and benzo(g,h,i)perylene were not detected in the re-extraction

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.58
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C21-C30)	n.a.	4.3	J	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	6.7	J	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,100		45.4	8.17	1
06944	Antimony	7440-36-0	4.54	U	4.54	0.839	1
06935	Arsenic	7440-38-2	4.69		4.54	0.794	1
06946	Barium	7440-39-3	62.5		1.13	0.0374	1
06947	Beryllium	7440-41-7	0.401	J	1.13	0.0760	1
07914	Boron	7440-42-8	2.32	J	11.3	0.952	1
06949	Cadmium	7440-43-9	1.13	U	1.13	0.0862	1
01650	Calcium	7440-70-2	6,090		22.7	3.79	1
06951	Chromium	7440-47-3	17.6		3.40	0.181	1
06952	Cobalt	7440-48-4	5.00		1.13	0.112	1
06953	Copper	7440-50-8	8.05		2.27	0.329	1
01654	Iron	7439-89-6	18,500		45.4	4.10	1
06955	Lead	7439-92-1	4.78		3.40	0.567	1
01656	Lithium	7439-93-2	24.9		4.5	0.39	1
01657	Magnesium	7439-95-4	5,610		11.3	1.89	1
06958	Manganese	7439-96-5	241		1.13	0.0941	1
06960	Molybdenum	7439-98-7	0.366	J	2.27	0.193	1
06961	Nickel	7440-02-0	9.87		2.27	0.147	1
10145	Phosphorus	7723-14-0	356		11.3	3.28	1
01662	Potassium	7440-09-7	2,780		113	9.46	1
01667	Sodium	7440-23-5	117		113	18.9	1
06969	Tin	7440-31-5	2.86	J	11.3	0.249	1
06970	Titanium	7440-32-6	1,010		1.13	0.193	1
06971	Vanadium	7440-62-2	32.0		1.13	0.147	1
06972	Zinc	7440-66-6	49.7		4.54	0.227	1
10146	Zirconium	7440-67-7	2.68	J	5.67	0.952	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.212	J	0.454	0.113	2
06142	Silver	7440-22-4	0.0313	J	0.227	0.0295	2
06144	Strontium	7440-24-6	13.5		0.454	0.0771	2
06145	Thallium	7440-28-0	0.218	J	0.227	0.0340	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0183	U	0.0183	0.0110	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 19.8 C.	n.a.	8.16	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	11.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.131	JQ	1.13	0.0569	1
11031	12378-PeCDD	40321-76-4	0.148	JB	5.64	0.0632	1
11031	123478-HxCDD	39227-28-6	0.108	JBQ	5.64	0.0405	1
11031	123678-HxCDD	57653-85-7	5.64	U	5.64	0.0451	1
11031	123789-HxCDD	19408-74-3	0.0559	JBQ	5.64	0.0430	1
11031	1234678-HpCDD	35822-46-9	1.26	JB	5.64	0.0651	1
11031	OCDD	3268-87-9	8.57	JB	11.3	0.0667	1
11031	2378-TCDF	51207-31-9	1.13	U	1.13	0.0624	1
11031	12378-PeCDF	57117-41-6	0.192	JBQ	5.64	0.0379	1
11031	23478-PeCDF	57117-31-4	0.158	JBQ	5.64	0.0341	1
11031	123478-HxCDF	70648-26-9	0.100	JB	5.64	0.0357	1
11031	123678-HxCDF	57117-44-9	5.64	U	5.64	0.0354	1
11031	123789-HxCDF	72918-21-9	0.138	JB	5.64	0.0356	1
11031	234678-HxCDF	60851-34-5	0.130	JBQ	5.64	0.0347	1
11031	1234678-HpCDF	67562-39-4	0.265	JB	5.64	0.0263	1
11031	1234789-HpCDF	55673-89-7	0.0871	JBQ	5.64	0.0397	1
11031	OCDF	39001-02-0	0.488	JB	11.3	0.0794	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.190				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	50	25 - 181
13C12-123478-HxCDD	62	32 - 141
13C12-123678-HxCDD	60	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	50	23 - 140
13C12-OCDD	50	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	49	24 - 185
13C12-23478-PeCDF	51	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	59	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	43	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 21:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 09:36	Laura M Krieger	23.58
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:50	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:50	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 03:30	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 10:54	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 01:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:21	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-508-SA5A-SB-33.0-34.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279104
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 09:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2907 SDG#: PH129-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:52	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:52	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:52	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:52	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:03	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279105
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 08:00

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2908 SDG#: PH129-08TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279105
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 08:00

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2908 SDG#: PH129-08TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	2.0	U	2.0	0.5	1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y133301AA	11/26/2013 22:08	Kevin A Sposito	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-111413 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7279105
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 08:00

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2908 SDG#: PH129-08TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00527	13b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133241AA	11/20/2013 12:20	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E133241AA	11/20/2013 12:20	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y133301AA	11/26/2013 22:08	Kevin A Sposito	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/21/2013 23:32	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/21/2013 23:32	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	45		19	6.4	1
12969	Chrysene	218-01-9	0.46	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
bis(2-Ethylhexyl)phthalate
chrysene
were not detected in the re-extraction.

Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	2,200	U	2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	29	J	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		42.3	7.63	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.783	1
06935	Arsenic	7440-38-2	11.4		4.23	0.741	1
06946	Barium	7440-39-3	105		1.06	0.0349	1
06947	Beryllium	7440-41-7	0.847	J	1.06	0.0709	1
07914	Boron	7440-42-8	2.92	J	10.6	0.889	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0805	1
01650	Calcium	7440-70-2	4,190		21.2	3.54	1
06951	Chromium	7440-47-3	21.0		3.18	0.169	1
06952	Cobalt	7440-48-4	5.57		1.06	0.105	1
06953	Copper	7440-50-8	14.9		2.12	0.307	1
01654	Iron	7439-89-6	29,700		212	19.2	5
06955	Lead	7439-92-1	45.1		3.18	0.529	1
01656	Lithium	7439-93-2	35.3		4.2	0.36	1
01657	Magnesium	7439-95-4	6,310		10.6	1.77	1
06958	Manganese	7439-96-5	304		1.06	0.0879	1
06960	Molybdenum	7439-98-7	0.264	J	2.12	0.180	1
06961	Nickel	7440-02-0	12.4		2.12	0.138	1
10145	Phosphorus	7723-14-0	423		10.6	3.06	1
01662	Potassium	7440-09-7	3,530		106	8.83	1
01667	Sodium	7440-23-5	112		106	17.7	1
06969	Tin	7440-31-5	3.23	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,210		1.06	0.180	1
06971	Vanadium	7440-62-2	42.4		1.06	0.138	1
06972	Zinc	7440-66-6	73.6		4.23	0.212	1
10146	Zirconium	7440-67-7	3.39	J	5.29	0.889	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.154	J	0.423	0.106	2
06142	Silver	7440-22-4	0.212	U	0.212	0.0275	2
06144	Strontium	7440-24-6	19.8		0.423	0.0720	2
06145	Thallium	7440-28-0	0.288		0.212	0.0318	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.43 U	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.7 C.	n.a.	8.25	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	7.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0583	JQ	1.06	0.0474	1
11031	12378-PeCDD	40321-76-4	0.131	JB	5.28	0.0609	1
11031	123478-HxCDD	39227-28-6	0.213	JBQ	5.28	0.0580	1
11031	123678-HxCDD	57653-85-7	0.708	JBQ	5.28	0.0621	1
11031	123789-HxCDD	19408-74-3	0.406	JB	5.28	0.0575	1
11031	1234678-HpCDD	35822-46-9	49.4	B	5.28	0.117	1
11031	OCDD	3268-87-9	605	B	10.6	0.0817	1
11031	2378-TCDF	51207-31-9	0.0723	JQ	1.06	0.0542	1
11031	12378-PeCDF	57117-41-6	1.26	JBQ	5.28	0.0418	1
11031	23478-PeCDF	57117-31-4	0.177	JBQ	5.28	0.0384	1
11031	123478-HxCDF	70648-26-9	0.313	JBQ	5.28	0.0418	1
11031	123678-HxCDF	57117-44-9	0.255	JBQ	5.28	0.0402	1
11031	123789-HxCDF	72918-21-9	0.234	JBQ	5.28	0.0408	1
11031	234678-HxCDF	60851-34-5	0.215	JB	5.28	0.0427	1
11031	1234678-HpCDF	67562-39-4	1.51	JB	5.28	0.0301	1
11031	1234789-HpCDF	55673-89-7	0.176	JB	5.28	0.0369	1
11031	OCDF	39001-02-0	3.38	JB	10.6	0.0605	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.887				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	50	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	56	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 21:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:20	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 03:48	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 08:47	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 02:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/27/2013 06:11	Joanne M Gates	5
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:25	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279106
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:18

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2909 SDG#: PH129-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:55	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:55	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:55	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:55	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 17:46	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	0.81	J	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.2	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	0.86	J	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	2.4		1.8	0.74	1
12969	Pyrene	129-00-0	1.0	J	1.8	0.74	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.64
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	9,200		2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	4.6	J	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	14		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	22		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		42.9	7.73	1
06944	Antimony	7440-36-0	4.29	U	4.29	0.793	1
06935	Arsenic	7440-38-2	4.15	J	4.29	0.750	1
06946	Barium	7440-39-3	81.4		1.07	0.0354	1
06947	Beryllium	7440-41-7	0.549	J	1.07	0.0718	1
07914	Boron	7440-42-8	2.39	J	10.7	0.900	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0815	1
01650	Calcium	7440-70-2	2,810		21.4	3.58	1
06951	Chromium	7440-47-3	14.3		3.22	0.172	1
06952	Cobalt	7440-48-4	4.40		1.07	0.106	1
06953	Copper	7440-50-8	6.59		2.14	0.311	1
01654	Iron	7439-89-6	18,800		42.9	3.88	1
06955	Lead	7439-92-1	5.55		3.22	0.536	1
01656	Lithium	7439-93-2	24.3		4.3	0.36	1
01657	Magnesium	7439-95-4	3,990		10.7	1.79	1
06958	Manganese	7439-96-5	253		1.07	0.0890	1
06960	Molybdenum	7439-98-7	0.227	J	2.14	0.182	1
06961	Nickel	7440-02-0	7.91		2.14	0.139	1
10145	Phosphorus	7723-14-0	266		10.7	3.10	1
01662	Potassium	7440-09-7	2,700		107	8.94	1
01667	Sodium	7440-23-5	141		107	17.9	1
06969	Tin	7440-31-5	2.78	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,070		1.07	0.182	1
06971	Vanadium	7440-62-2	30.2		1.07	0.139	1
06972	Zinc	7440-66-6	49.3		4.29	0.214	1
10146	Zirconium	7440-67-7	2.81	J	5.36	0.900	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.138	J	0.429	0.107	2
06142	Silver	7440-22-4	0.0281	J	0.214	0.0279	2
06144	Strontium	7440-24-6	18.9		0.429	0.0729	2
06145	Thallium	7440-28-0	0.256		0.214	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0125	J	0.0181	0.0109	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.41 J	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.9 C.	n.a.	8.17	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	10.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.138 JQ	1.07	0.108	1
11031	12378-PeCDD	40321-76-4	0.0893 JBQ	5.37	0.0777	1
11031	123478-HxCDD	39227-28-6	5.37 U	5.37	0.0559	1
11031	123678-HxCDD	57653-85-7	0.187 JBQ	5.37	0.0589	1
11031	123789-HxCDD	19408-74-3	0.146 JBQ	5.37	0.0536	1
11031	1234678-HpCDD	35822-46-9	3.03 JB	5.37	0.0769	1
11031	OCDD	3268-87-9	21.9 B	10.7	0.0677	1
11031	2378-TCDF	51207-31-9	1.07 U	1.07	0.0950	1
11031	12378-PeCDF	57117-41-6	0.134 JBQ	5.37	0.0397	1
11031	23478-PeCDF	57117-31-4	0.0751 JBQ	5.37	0.0379	1
11031	123478-HxCDF	70648-26-9	0.109 JBQ	5.37	0.0441	1
11031	123678-HxCDF	57117-44-9	0.0739 JB	5.37	0.0435	1
11031	123789-HxCDF	72918-21-9	0.147 JBQ	5.37	0.0446	1
11031	234678-HxCDF	60851-34-5	0.0632 JB	5.37	0.0424	1
11031	1234678-HpCDF	67562-39-4	0.385 JBQ	5.37	0.0311	1
11031	1234789-HpCDF	55673-89-7	0.0840 JBQ	5.37	0.0381	1
11031	OCDF	39001-02-0	0.768 JBQ	10.7	0.0787	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0506			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	40	25 - 164
13C12-12378-PeCDD	44	25 - 181
13C12-123478-HxCDD	44	32 - 141
13C12-123678-HxCDD	44	28 - 130
13C12-123789-HxCDD	43	28 - 130
13C12-1234678-HpCDD	40	23 - 140
13C12-OCDD	39	17 - 157
13C12-2378-TCDF	40	24 - 169
13C12-12378-PeCDF	46	24 - 185
13C12-23478-PeCDF	45	21 - 178
13C12-123478-HxCDF	43	26 - 152
13C12-123678-HxCDF	44	26 - 123
13C12-234678-HxCDF	44	28 - 136
13C12-123789-HxCDF	46	29 - 147
13C12-1234678-HpCDF	45	28 - 143
13C12-1234789-HpCDF	39	26 - 138
13C12-OCDF	38	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 22:31	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 10:14	Laura M Krieger	22.64
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:51	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:51	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:28	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 04:06	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 11:37	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 03:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-9.0-10.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279107
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 13:50

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2910 SDG#: PH129-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:57	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:57	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:57	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:57	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 18:10	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	32		21	7	0.96
10237	Acrolein	107-02-8	110	U	110	21	0.96
10237	Acrylonitrile	107-13-1	21	U	21	4	0.96
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.96
10237	Benzene	71-43-2	5	U	5	0.5	0.96
10237	Bromobenzene	108-86-1	5	U	5	1	0.96
10237	Bromochloromethane	74-97-5	5	U	5	1	0.96
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.96
10237	Bromoform	75-25-2	5	U	5	1	0.96
10237	Bromomethane	74-83-9	5	U	5	2	0.96
10237	2-Butanone	78-93-3	11	U	11	4	0.96
10237	t-Butyl alcohol	75-65-0	53	U	53	21	0.96
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.96
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.96
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.96
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.96
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.96
10237	Chlorobenzene	108-90-7	5	U	5	1	0.96
10237	Chloroethane	75-00-3	5	U	5	2	0.96
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	0.96
10237	Chloroform	67-66-3	5	U	5	1	0.96
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.96
10237	Chloromethane	74-87-3	5	U	5	2	0.96
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.96
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.96
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.96
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.96
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.96
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.96
10237	Dibromomethane	74-95-3	5	U	5	1	0.96
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.96
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.96
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.96
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.96
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.96
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.96
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.96
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.96
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.96
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.96
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.96
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.96
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.96
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.96
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.96
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.96
10237	Ethylbenzene	100-41-4	5	U	5	1	0.96
10237	Freon 113	76-13-1	5	U	5	2	0.96
10237	Freon 133a	75-88-7	5	U	5	2	0.96
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.96
10237	2-Hexanone	591-78-6	11	U	11	3	0.96

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.96
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.96
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.96
10237	Methyl Iodide	74-88-4	5	U	5	3	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.96
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	0.96
10237	Methylene Chloride	75-09-2	5	U	5	2	0.96
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.96
10237	Styrene	100-42-5	5	U	5	1	0.96
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.96
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.96
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.96
10237	Toluene	108-88-3	5	U	5	1	0.96
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.96
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.96
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.96
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.96
10237	Trichloroethene	79-01-6	5	U	5	1	0.96
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.96
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.96
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.96
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.96
10237	Vinyl Acetate	108-05-4	11	U	11	2	0.96
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.96
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.96
10237	o-Xylene	95-47-6	5	U	5	1	0.96
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	15	U	15	4.8	21.97

The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.

GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.9		1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.65	J	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.2	J	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.4	J	1.8	0.73	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	1.3	J	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and internal standard areas are again outside of the QC acceptance limits, indicating a matrix effect. The reported data is from the initial analysis of the sample.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.8
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	13,000		2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.7		5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C30-C40)	n.a.	12		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		43.6	7.86	1
06944	Antimony	7440-36-0	4.36	U	4.36	0.807	1
06935	Arsenic	7440-38-2	4.30	J	4.36	0.763	1
06946	Barium	7440-39-3	104		1.09	0.0360	1
06947	Beryllium	7440-41-7	0.562	J	1.09	0.0731	1
07914	Boron	7440-42-8	3.94	J	10.9	0.916	1
06949	Cadmium	7440-43-9	1.09	U	1.09	0.0829	1
01650	Calcium	7440-70-2	2,250		21.8	3.64	1
06951	Chromium	7440-47-3	16.6		3.27	0.174	1
06952	Cobalt	7440-48-4	5.48		1.09	0.108	1
06953	Copper	7440-50-8	9.57		2.18	0.316	1
01654	Iron	7439-89-6	18,600		43.6	3.95	1
06955	Lead	7439-92-1	5.84		3.27	0.545	1
01656	Lithium	7439-93-2	21.2		4.4	0.37	1
01657	Magnesium	7439-95-4	3,820		10.9	1.82	1
06958	Manganese	7439-96-5	361		1.09	0.0905	1
06960	Molybdenum	7439-98-7	0.422	J	2.18	0.185	1
06961	Nickel	7440-02-0	11.0		2.18	0.142	1
10145	Phosphorus	7723-14-0	340		10.9	3.15	1
01662	Potassium	7440-09-7	3,210		109	9.09	1
01667	Sodium	7440-23-5	117		109	18.2	1
06969	Tin	7440-31-5	2.74	J	10.9	0.240	1
06970	Titanium	7440-32-6	1,040		1.09	0.185	1
06971	Vanadium	7440-62-2	30.9		1.09	0.142	1
06972	Zinc	7440-66-6	53.7		4.36	0.218	1
10146	Zirconium	7440-67-7	3.91	J	5.45	0.916	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.153	J	0.436	0.109	2
06142	Silver	7440-22-4	0.0438	J	0.218	0.0284	2
06144	Strontium	7440-24-6	22.1		0.436	0.0741	2
06145	Thallium	7440-28-0	0.254		0.218	0.0327	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0171	U	0.0171	0.0102	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1.3		0.44	0.16	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.86		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.06 U	1.06	0.0566	1
11031	12378-PeCDD	40321-76-4	0.118 JBQ	5.31	0.0472	1
11031	123478-HxCDD	39227-28-6	0.0550 JBQ	5.31	0.0378	1
11031	123678-HxCDD	57653-85-7	0.335 JBQ	5.31	0.0387	1
11031	123789-HxCDD	19408-74-3	0.409 JBQ	5.31	0.0370	1
11031	1234678-HpCDD	35822-46-9	0.384 JB	5.31	0.0453	1
11031	OCDD	3268-87-9	2.27 JB	10.6	0.0448	1
11031	2378-TCDF	51207-31-9	0.0626 J	1.06	0.0548	1
11031	12378-PeCDF	57117-41-6	0.145 JBQ	5.31	0.0304	1
11031	23478-PeCDF	57117-31-4	0.0714 JBQ	5.31	0.0297	1
11031	123478-HxCDF	70648-26-9	0.0939 JB	5.31	0.0271	1
11031	123678-HxCDF	57117-44-9	0.0747 JBQ	5.31	0.0256	1
11031	123789-HxCDF	72918-21-9	0.375 JBQ	5.31	0.0278	1
11031	234678-HxCDF	60851-34-5	0.119 JBQ	5.31	0.0264	1
11031	1234678-HpCDF	67562-39-4	0.153 JBQ	5.31	0.0149	1
11031	1234789-HpCDF	55673-89-7	0.0955 JBQ	5.31	0.0209	1
11031	OCDF	39001-02-0	0.368 JB	10.6	0.0530	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0203			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	50	25 - 164
13C12-12378-PeCDD	48	25 - 181
13C12-123478-HxCDD	55	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	54	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	49	24 - 185
13C12-23478-PeCDF	46	21 - 178
13C12-123478-HxCDF	52	26 - 152
13C12-123678-HxCDF	53	26 - 123
13C12-234678-HxCDF	53	28 - 136
13C12-123789-HxCDF	56	29 - 147
13C12-1234678-HpCDF	55	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	41	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/21/2013 23:38	Sara E Johnson	0.96
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 17:29	Jason M Long	21.97
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:27	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	3	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	4	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201331933144	11/15/2013 20:09	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	2	201331933144	11/15/2013 20:10	Mitchell R Washel	n.a.
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 18:16	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 12:08	Laura M Krieger	24.8
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:54	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:54	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:36	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 04:25	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 09:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 07:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279108
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 12:29	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:22	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:22	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:22	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:22	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 18:26	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	170	22	8	0.98
10237	Acrolein	107-02-8	170	110	22	0.98
10237	Acrylonitrile	107-13-1	100	22	4	0.98
10237	t-Amyl methyl ether	994-05-8	21	5	1	0.98
10237	Benzene	71-43-2	23	5	0.5	0.98
10237	Bromobenzene	108-86-1	22	5	1	0.98
10237	Bromochloromethane	74-97-5	27	5	1	0.98
10237	Bromodichloromethane	75-27-4	22	5	1	0.98
10237	Bromoform	75-25-2	22	5	1	0.98
10237	Bromomethane	74-83-9	26	5	2	0.98
10237	2-Butanone	78-93-3	150	11	4	0.98
10237	t-Butyl alcohol	75-65-0	250	54	22	0.98
10237	n-Butylbenzene	104-51-8	23	5	1	0.98
10237	sec-Butylbenzene	135-98-8	23	5	1	0.98
10237	tert-Butylbenzene	98-06-6	23	5	1	0.98
10237	Carbon Disulfide	75-15-0	23	5	1	0.98
10237	Carbon Tetrachloride	56-23-5	24	5	1	0.98
10237	Chlorobenzene	108-90-7	23	5	1	0.98
10237	Chloroethane	75-00-3	25	5	2	0.98
10237	2-Chloroethyl Vinyl Ether	110-75-8	15	11	2	0.98
10237	Chloroform	67-66-3	24	5	1	0.98
10237	1-Chlorohexane	544-10-5	23	5	1	0.97
10237	Chloromethane	74-87-3	25	5	2	0.98
10237	2-Chlorotoluene	95-49-8	23	5	1	0.98
10237	4-Chlorotoluene	106-43-4	23	5	1	0.98
10237	Chlorotrifluoroethene	79-38-9	7	5	2	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	20	5	2	0.98
10237	Dibromochloromethane	124-48-1	22	5	1	0.98
10237	1,2-Dibromoethane	106-93-4	22	5	1	0.98
10237	Dibromomethane	74-95-3	23	5	1	0.98
10237	1,2-Dichlorobenzene	95-50-1	23	5	1	0.98
10237	1,3-Dichlorobenzene	541-73-1	23	5	1	0.98
10237	1,4-Dichlorobenzene	106-46-7	22	5	1	0.98
10237	Dichlorodifluoromethane	75-71-8	28	5	2	0.98
10237	1,1-Dichloroethane	75-34-3	24	5	1	0.98
10237	1,2-Dichloroethane	107-06-2	23	5	1	0.98
10237	1,1-Dichloroethene	75-35-4	26	5	1	0.98
10237	cis-1,2-Dichloroethene	156-59-2	23	5	1	0.98
10237	trans-1,2-Dichloroethene	156-60-5	24	5	1	0.98
10237	1,2-Dichloropropane	78-87-5	24	5	1	0.98
10237	1,3-Dichloropropane	142-28-9	23	5	1	0.98
10237	2,2-Dichloropropane	594-20-7	23	5	1	0.98
10237	1,1-Dichloropropene	563-58-6	24	5	1	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	23	5	1	0.98
10237	trans-1,3-Dichloropropene	10061-02-6	21	5	1	0.98
10237	Ethyl t-butyl ether	637-92-3	20	5	1	0.98
10237	Ethylbenzene	100-41-4	23	5	1	0.98
10237	Freon 113	76-13-1	25	5	2	0.98
10237	Freon 133a	75-88-7	20	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	20	5	2	0.98
10237	2-Hexanone	591-78-6	81	11	3	0.98

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	di-Isopropyl ether	108-20-3	23	5	1	0.98
10237	Isopropylbenzene	98-82-8	23	5	1	0.98
10237	p-Isopropyltoluene	99-87-6	23	5	1	0.98
10237	Methyl Iodide	74-88-4	25	5	3	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	22	5	0.5	0.98
10237	4-Methyl-2-pentanone	108-10-1	85	11	3	0.98
10237	Methylene Chloride	75-09-2	25	5	2	0.98
10237	n-Propylbenzene	103-65-1	25	5	1	0.98
10237	Styrene	100-42-5	23	5	1	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	22	5	1	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	22	5	1	0.98
10237	Tetrachloroethene	127-18-4	25	5	1	0.98
10237	Toluene	108-88-3	24	5	1	0.98
10237	1,2,3-Trichlorobenzene	87-61-6	19	5	1	0.98
10237	1,2,4-Trichlorobenzene	120-82-1	19	5	1	0.98
10237	1,1,1-Trichloroethane	71-55-6	27	5	1	0.98
10237	1,1,2-Trichloroethane	79-00-5	24	5	1	0.98
10237	Trichloroethene	79-01-6	24	5	1	0.98
10237	Trichlorofluoromethane	75-69-4	27	5	2	0.98
10237	1,2,3-Trichloropropane	96-18-4	22	5	1	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	23	5	1	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	23	5	1	0.98
10237	Vinyl Acetate	108-05-4	120	11	2	0.97
10237	Vinyl Chloride	75-01-4	26	5	1	0.98
10237	m+p-Xylene	179601-23-1	47	5	1	0.98
10237	o-Xylene	95-47-6	22	5	1	0.98
GC/MS Volatiles	**SW-846 8260B SIM**		ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	110	16	5.4	24.7

The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.

GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	42	1.8	0.73	1
12969	Acenaphthylene	208-96-8	31	1.8	0.37	1
12969	Anthracene	120-12-7	36	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	36	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	34	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	38	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	31	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	49	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	35	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	33	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	37	20	6.6	1
12969	Chrysene	218-01-9	37	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	38	1.8	0.73	1
12969	Diethylphthalate	84-66-2	37	20	6.6	1
12969	Dimethylphthalate	131-11-3	32	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	35	20	6.6	1
12969	Fluoranthene	206-44-0	38	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	36		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	40		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	37		1.8	0.73	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	40		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	37		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	33		20	6.6	1
12969	Phenanthrene	85-01-8	36		1.8	0.73	1
12969	Pyrene	129-00-0	34		1.8	0.73	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.2		1.1	0.2	24.65
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	22,000		2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	170		18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	210		18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.7	J	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	9.1		5.5	2.2	1
12952	EFH (C21-C30)	n.a.	23		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	24		11	4.4	1
12952	EFH (C8-C11)	n.a.	4.1	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,100		43.2	7.78	1
06944	Antimony	7440-36-0	35.4		4.32	0.799	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	20.4	4.32	0.756	1
06946	Barium	7440-39-3	300	1.08	0.0356	1
06947	Beryllium	7440-41-7	6.05	1.08	0.0723	1
07914	Boron	7440-42-8	219	10.8	0.907	1
06949	Cadmium	7440-43-9	5.34	1.08	0.0821	1
01650	Calcium	7440-70-2	3,490	21.6	3.61	1
06951	Chromium	7440-47-3	36.8	3.24	0.173	1
06952	Cobalt	7440-48-4	58.4	1.08	0.107	1
06953	Copper	7440-50-8	35.3	2.16	0.313	1
01654	Iron	7439-89-6	18,500	43.2	3.91	1
06955	Lead	7439-92-1	26.0	3.24	0.540	1
01656	Lithium	7439-93-2	135	4.3	0.37	1
01657	Magnesium	7439-95-4	4,270	10.8	1.80	1
06958	Manganese	7439-96-5	291	1.08	0.0896	1
06960	Molybdenum	7439-98-7	214	2.16	0.184	1
06961	Nickel	7440-02-0	62.9	2.16	0.140	1
10145	Phosphorus	7723-14-0	385	10.8	3.12	1
01662	Potassium	7440-09-7	4,080	108	9.00	1
01667	Sodium	7440-23-5	1,250	108	18.0	1
06969	Tin	7440-31-5	409	10.8	0.238	1
06970	Titanium	7440-32-6	1,330	1.08	0.184	1
06971	Vanadium	7440-62-2	86.0	1.08	0.140	1
06972	Zinc	7440-66-6	107	4.32	0.216	1
10146	Zirconium	7440-67-7	110	5.40	0.907	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.49	0.432	0.108	2
06142	Silver	7440-22-4	12.3	0.216	0.0281	2
06144	Strontium	7440-24-6	30.6	0.432	0.0734	2
06145	Thallium	7440-28-0	0.760	0.216	0.0324	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.168	0.0177	0.0106	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.8		1.06	0.0525	1
11031	12378-PeCDD	40321-76-4	107	B	5.31	0.0504	1
11031	123478-HxCDD	39227-28-6	111	B	5.31	0.0431	1
11031	123678-HxCDD	57653-85-7	111	B	5.31	0.0444	1
11031	123789-HxCDD	19408-74-3	112	B	5.31	0.0448	1
11031	1234678-HpCDD	35822-46-9	113	B	5.31	0.0601	1
11031	OCDD	3268-87-9	227	B	10.6	0.0550	1
11031	2378-TCDF	51207-31-9	20.9		1.06	0.0470	1
11031	12378-PeCDF	57117-41-6	110	B	5.31	0.0323	1
11031	23478-PeCDF	57117-31-4	115	B	5.31	0.0316	1
11031	123478-HxCDF	70648-26-9	114	B	5.31	0.0428	1
11031	123678-HxCDF	57117-44-9	113	B	5.31	0.0410	1
11031	123789-HxCDF	72918-21-9	110	B	5.31	0.0422	1
11031	234678-HxCDF	60851-34-5	114	B	5.31	0.0423	1
11031	1234678-HpCDF	67562-39-4	114	B	5.31	0.0377	1
11031	1234789-HpCDF	55673-89-7	115	B	5.31	0.0456	1
11031	OCDF	39001-02-0	219	B	10.6	0.0551	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 00:01	Sara E Johnson	0.98
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 00:46	Sara E Johnson	0.97
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 19:12	Jason M Long	24.7
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	3	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	4	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201331933144	11/15/2013 20:15	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	2	201331933144	11/15/2013 20:15	Mitchell R Washel	n.a.
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 18:48	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 12:45	Laura M Krieger	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:54	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:54	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:43	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 04:43	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 09:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 08:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279109
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 12:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:29	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:29	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:29	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:29	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	190	21	7	0.97
10237	Acrolein	107-02-8	160	110	21	0.97
10237	Acrylonitrile	107-13-1	110	21	4	0.97
10237	t-Amyl methyl ether	994-05-8	22	5	1	0.97
10237	Benzene	71-43-2	24	5	0.5	0.97
10237	Bromobenzene	108-86-1	23	5	1	0.97
10237	Bromochloromethane	74-97-5	27	5	1	0.97
10237	Bromodichloromethane	75-27-4	23	5	1	0.97
10237	Bromoform	75-25-2	23	5	1	0.97
10237	Bromomethane	74-83-9	27	5	2	0.97
10237	2-Butanone	78-93-3	170	11	4	0.97
10237	t-Butyl alcohol	75-65-0	270	53	21	0.97
10237	n-Butylbenzene	104-51-8	25	5	1	0.97
10237	sec-Butylbenzene	135-98-8	25	5	1	0.97
10237	tert-Butylbenzene	98-06-6	23	5	1	0.97
10237	Carbon Disulfide	75-15-0	24	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	26	5	1	0.97
10237	Chlorobenzene	108-90-7	23	5	1	0.97
10237	Chloroethane	75-00-3	25	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	15	11	2	0.97
10237	Chloroform	67-66-3	25	5	1	0.97
10237	1-Chlorohexane	544-10-5	22	5	1	0.96
10237	Chloromethane	74-87-3	26	5	2	0.97
10237	2-Chlorotoluene	95-49-8	24	5	1	0.97
10237	4-Chlorotoluene	106-43-4	23	5	1	0.97
10237	Chlorotrifluoroethene	79-38-9	6	5	2	0.96
10237	1,2-Dibromo-3-chloropropane	96-12-8	22	5	2	0.97
10237	Dibromochloromethane	124-48-1	23	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	24	5	1	0.97
10237	Dibromomethane	74-95-3	24	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	23	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	24	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	23	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	29	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	25	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	25	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	27	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	24	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	25	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	24	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	23	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	24	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	25	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	24	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	22	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	22	5	1	0.97
10237	Ethylbenzene	100-41-4	24	5	1	0.97
10237	Freon 113	76-13-1	26	5	2	0.97
10237	Freon 133a	75-88-7	20	5	2	0.96
10237	Hexachlorobutadiene	87-68-3	21	5	2	0.97
10237	2-Hexanone	591-78-6	92	11	3	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**	**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	24	5	1	0.97
10237	Isopropylbenzene	98-82-8	24	5	1	0.97
10237	p-Isopropyltoluene	99-87-6	24	5	1	0.97
10237	Methyl Iodide	74-88-4	26	5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	23	5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	92	11	3	0.97
10237	Methylene Chloride	75-09-2	27	5	2	0.97
10237	n-Propylbenzene	103-65-1	26	5	1	0.97
10237	Styrene	100-42-5	24	5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	23	5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	24	5	1	0.97
10237	Tetrachloroethene	127-18-4	27	5	1	0.97
10237	Toluene	108-88-3	24	5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	21	5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	21	5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	27	5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	25	5	1	0.97
10237	Trichloroethene	79-01-6	25	5	1	0.97
10237	Trichlorofluoromethane	75-69-4	28	5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	24	5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	24	5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	24	5	1	0.97
10237	Vinyl Acetate	108-05-4	88	11	2	0.96
10237	Vinyl Chloride	75-01-4	28	5	1	0.97
10237	m+p-Xylene	179601-23-1	48	5	1	0.97
10237	o-Xylene	95-47-6	23	5	1	0.97
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	120	16	5.2	23.67
The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.						
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	44	1.8	0.73	1
12969	Acenaphthylene	208-96-8	35	1.8	0.36	1
12969	Anthracene	120-12-7	38	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	36	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	35	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	39	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	32	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	36	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	35	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	34	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	37	20	6.6	1
12969	Chrysene	218-01-9	37	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	38	1.8	0.73	1
12969	Diethylphthalate	84-66-2	38	20	6.6	1
12969	Dimethylphthalate	131-11-3	36	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	35	20	6.6	1
12969	Fluoranthene	206-44-0	40	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	38		1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	37		1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	41		1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	43		1.8	0.73	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	39		1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	35		1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	51		20	6.6	1
12969	Phenanthrene	85-01-8	43		1.8	0.73	1
12969	Pyrene	129-00-0	36		1.8	0.73	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	8.9		1.1	0.2	24.46
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	23,000		2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	180		18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	220		18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.6	J	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	7.4		5.5	2.2	1
12952	EFH (C21-C30)	n.a.	14		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	16		11	4.4	1
12952	EFH (C8-C11)	n.a.	4.2	J	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,200		43.2	7.78	1
06944	Antimony	7440-36-0	30.0		4.32	0.799	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	20.7	4.32	0.756	1
06946	Barium	7440-39-3	326	1.08	0.0356	1
06947	Beryllium	7440-41-7	6.27	1.08	0.0723	1
07914	Boron	7440-42-8	220	10.8	0.907	1
06949	Cadmium	7440-43-9	5.27	1.08	0.0821	1
01650	Calcium	7440-70-2	2,790	21.6	3.61	1
06951	Chromium	7440-47-3	38.3	3.24	0.173	1
06952	Cobalt	7440-48-4	59.4	1.08	0.107	1
06953	Copper	7440-50-8	36.6	2.16	0.313	1
01654	Iron	7439-89-6	19,400	43.2	3.91	1
06955	Lead	7439-92-1	22.1	3.24	0.540	1
01656	Lithium	7439-93-2	136	4.3	0.37	1
01657	Magnesium	7439-95-4	4,150	10.8	1.80	1
06958	Manganese	7439-96-5	330	1.08	0.0896	1
06960	Molybdenum	7439-98-7	212	2.16	0.184	1
06961	Nickel	7440-02-0	64.9	2.16	0.140	1
10145	Phosphorus	7723-14-0	341	10.8	3.12	1
01662	Potassium	7440-09-7	4,000	108	9.00	1
01667	Sodium	7440-23-5	1,250	108	18.0	1
06969	Tin	7440-31-5	406	10.8	0.238	1
06970	Titanium	7440-32-6	1,350	1.08	0.184	1
06971	Vanadium	7440-62-2	90.7	1.08	0.140	1
06972	Zinc	7440-66-6	104	4.32	0.216	1
10146	Zirconium	7440-67-7	110	5.40	0.907	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.36	0.432	0.108	2
06142	Silver	7440-22-4	12.0	0.216	0.0281	2
06144	Strontium	7440-24-6	32.9	0.432	0.0734	2
06145	Thallium	7440-28-0	0.733	0.216	0.0324	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.155	0.0173	0.0104	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.9		1.07	0.0557	1
11031	12378-PeCDD	40321-76-4	109	B	5.37	0.0492	1
11031	123478-HxCDD	39227-28-6	114	B	5.37	0.0452	1
11031	123678-HxCDD	57653-85-7	111	B	5.37	0.0478	1
11031	123789-HxCDD	19408-74-3	113	B	5.37	0.0457	1
11031	1234678-HpCDD	35822-46-9	116	B	5.37	0.0694	1
11031	OCDD	3268-87-9	224	B	10.7	0.0623	1
11031	2378-TCDF	51207-31-9	21.5		1.07	0.0476	1
11031	12378-PeCDF	57117-41-6	116	B	5.37	0.0328	1
11031	23478-PeCDF	57117-31-4	112	B	5.37	0.0290	1
11031	123478-HxCDF	70648-26-9	114	B	5.37	0.0485	1
11031	123678-HxCDF	57117-44-9	116	B	5.37	0.0460	1
11031	123789-HxCDF	72918-21-9	116	B	5.37	0.0449	1
11031	234678-HxCDF	60851-34-5	117	B	5.37	0.0460	1
11031	1234678-HpCDF	67562-39-4	118	B	5.37	0.0441	1
11031	1234789-HpCDF	55673-89-7	120	B	5.37	0.0536	1
11031	OCDF	39001-02-0	221	B	10.7	0.0559	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	60	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 00:23	Sara E Johnson	0.97
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 01:08	Sara E Johnson	0.96
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 19:32	Jason M Long	23.67
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	3	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	4	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201331933144	11/15/2013 20:18	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	2	201331933144	11/15/2013 20:19	Mitchell R Washel	n.a.
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 19:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 13:23	Laura M Krieger	24.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:55	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:55	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:51	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 05:02	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 09:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 09:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279110
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:52	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:32	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:32	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:32	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:32	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0SS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279111
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	3.0	0.44	0.15	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/27/2013 15:33	Clinton M Wilson	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0IS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279112
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1,080	44.1	15.4	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 18:57	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0PDS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279113
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	49.4	4.4	1.6	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 19:28	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279114
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		42.8	7.71	1
06944	Antimony	7440-36-0	4.28	U	4.28	0.791	1
06935	Arsenic	7440-38-2	4.25	J	4.28	0.748	1
06946	Barium	7440-39-3	112		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.621	J	1.07	0.0716	1
07914	Boron	7440-42-8	3.75	J	10.7	0.898	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0813	1
01650	Calcium	7440-70-2	2,320		21.4	3.57	1
06951	Chromium	7440-47-3	17.2		3.21	0.171	1
06952	Cobalt	7440-48-4	5.70		1.07	0.106	1
06953	Copper	7440-50-8	10.5		2.14	0.310	1
01654	Iron	7439-89-6	19,400		42.8	3.87	1
06955	Lead	7439-92-1	6.12		3.21	0.535	1
01656	Lithium	7439-93-2	22.5		4.3	0.36	1
01657	Magnesium	7439-95-4	4,020		10.7	1.79	1
06958	Manganese	7439-96-5	390		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.365	J	2.14	0.182	1
06961	Nickel	7440-02-0	10.8		2.14	0.139	1
10145	Phosphorus	7723-14-0	348		10.7	3.09	1
01662	Potassium	7440-09-7	3,450		107	8.92	1
01667	Sodium	7440-23-5	126		107	17.9	1
06969	Tin	7440-31-5	2.72	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,110		1.07	0.182	1
06971	Vanadium	7440-62-2	33.3		1.07	0.139	1
06972	Zinc	7440-66-6	56.4		4.28	0.214	1
10146	Zirconium	7440-67-7	4.22	J	5.35	0.898	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.169	J	0.428	0.107	2
06142	Silver	7440-22-4	0.0385	J	0.214	0.0278	2
06144	Strontium	7440-24-6	23.7		0.428	0.0727	2
06145	Thallium	7440-28-0	0.269		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.36	J	0.44	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.85		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	9.2		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	9.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279114
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 12:37	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:27	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:27	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:27	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:27	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-11.0-12.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279114
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:20

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2911 SDG#: PH129-11DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 19:36	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401A	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	36		22	8	0.97
10237	Acrolein	107-02-8	110	U	110	22	0.97
10237	Acrylonitrile	107-13-1	22	U	22	4	0.97
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.97
10237	Benzene	71-43-2	5	U	5	0.5	0.97
10237	Bromobenzene	108-86-1	5	U	5	1	0.97
10237	Bromochloromethane	74-97-5	5	U	5	1	0.97
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.97
10237	Bromoform	75-25-2	5	U	5	1	0.97
10237	Bromomethane	74-83-9	5	U	5	2	0.97
10237	2-Butanone	78-93-3	5	J	11	4	0.97
10237	t-Butyl alcohol	75-65-0	54	U	54	22	0.97
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.97
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.97
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.97
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.97
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.97
10237	Chlorobenzene	108-90-7	5	U	5	1	0.97
10237	Chloroethane	75-00-3	5	U	5	2	0.97
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	0.97
10237	Chloroform	67-66-3	5	U	5	1	0.97
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.97
10237	Chloromethane	74-87-3	5	U	5	2	0.97
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.97
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.97
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.97
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.97
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.97
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.97
10237	Dibromomethane	74-95-3	5	U	5	1	0.97
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.97
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.97
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.97
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.97
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.97
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.97
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.97
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.97
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.97
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.97
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.97
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.97
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.97
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.97
10237	Ethylbenzene	100-41-4	5	U	5	1	0.97
10237	Freon 113	76-13-1	5	U	5	2	0.97
10237	Freon 133a	75-88-7	5	U	5	2	0.97
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.97
10237	2-Hexanone	591-78-6	11	U	11	3	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.97
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.97
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.97
10237	Methyl Iodide	74-88-4	5	U	5	3	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.97
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	0.97
10237	Methylene Chloride	75-09-2	5	U	5	2	0.97
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.97
10237	Styrene	100-42-5	5	U	5	1	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.97
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.97
10237	Toluene	108-88-3	5	U	5	1	0.97
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.97
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.97
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.97
10237	Trichloroethene	79-01-6	5	U	5	1	0.97
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.97
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.97
10237	Vinyl Acetate	108-05-4	11	U	11	2	0.97
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.97
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.97
10237	o-Xylene	95-47-6	5	U	5	1	0.97
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	16	U	16	5.4	24.32
The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.							
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.74	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.37	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	0.75	J	1.9	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.7	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.7	1
12969	Chrysene	218-01-9	0.61	J	1.9	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.7	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.7	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.7	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	1.9	U	1.9	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.74	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	0.94	J	1.9	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.7	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.74	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.74	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.25
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	14,000		2,200	1,300	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the client required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	2.5	J	5.6	2.2	1
12952	EFH (C30-C40)	n.a.	5.4	J	11	4.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,100		42.7	7.70	1
06944	Antimony	7440-36-0	4.27	U	4.27	0.791	1
06935	Arsenic	7440-38-2	4.68		4.27	0.748	1
06946	Barium	7440-39-3	123		1.07	0.0353	1
06947	Beryllium	7440-41-7	0.636	J	1.07	0.0716	1
07914	Boron	7440-42-8	3.65	J	10.7	0.897	1
06949	Cadmium	7440-43-9	1.07	U	1.07	0.0812	1
01650	Calcium	7440-70-2	2,330		21.4	3.57	1
06951	Chromium	7440-47-3	18.4		3.21	0.171	1
06952	Cobalt	7440-48-4	5.66		1.07	0.106	1
06953	Copper	7440-50-8	12.2		2.14	0.310	1
01654	Iron	7439-89-6	20,000		42.7	3.87	1
06955	Lead	7439-92-1	5.83		3.21	0.534	1
01656	Lithium	7439-93-2	22.2		4.3	0.36	1
01657	Magnesium	7439-95-4	4,170		10.7	1.78	1
06958	Manganese	7439-96-5	326		1.07	0.0887	1
06960	Molybdenum	7439-98-7	0.405	J	2.14	0.182	1
06961	Nickel	7440-02-0	12.1		2.14	0.139	1
10145	Phosphorus	7723-14-0	396		10.7	3.09	1
01662	Potassium	7440-09-7	3,600		107	8.91	1
01667	Sodium	7440-23-5	120		107	17.8	1
06969	Tin	7440-31-5	2.49	J	10.7	0.235	1
06970	Titanium	7440-32-6	1,080		1.07	0.182	1
06971	Vanadium	7440-62-2	34.0		1.07	0.139	1
06972	Zinc	7440-66-6	57.7		4.27	0.214	1
10146	Zirconium	7440-67-7	4.14	J	5.34	0.897	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.157	J	0.427	0.107	2
06142	Silver	7440-22-4	0.0344	J	0.214	0.0278	2
06144	Strontium	7440-24-6	24.4		0.427	0.0726	2
06145	Thallium	7440-28-0	0.277		0.214	0.0321	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0107	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.33	J	0.45	0.16	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.5 C.	n.a.	6.89		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	10	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.107	JQ	1.07	0.0403	1
11031	12378-PeCDD	40321-76-4	0.281	JB	5.34	0.0538	1
11031	123478-HxCDD	39227-28-6	0.212	JBQ	5.34	0.0459	1
11031	123678-HxCDD	57653-85-7	0.338	JBQ	5.34	0.0473	1
11031	123789-HxCDD	19408-74-3	0.398	JB	5.34	0.0421	1
11031	1234678-HpCDD	35822-46-9	0.388	JB	5.34	0.0356	1
11031	OCDD	3268-87-9	1.55	JB	10.7	0.0374	1
11031	2378-TCDF	51207-31-9	0.0519	JQ	1.07	0.0439	1
11031	12378-PeCDF	57117-41-6	0.299	JBQ	5.34	0.0341	1
11031	23478-PeCDF	57117-31-4	0.282	JBQ	5.34	0.0311	1
11031	123478-HxCDF	70648-26-9	0.219	JB	5.34	0.0377	1
11031	123678-HxCDF	57117-44-9	0.256	JBQ	5.34	0.0366	1
11031	123789-HxCDF	72918-21-9	0.458	JB	5.34	0.0306	1
11031	234678-HxCDF	60851-34-5	0.243	JB	5.34	0.0366	1
11031	1234678-HpCDF	67562-39-4	0.217	JB	5.34	0.0181	1
11031	1234789-HpCDF	55673-89-7	0.238	JB	5.34	0.0251	1
11031	OCDF	39001-02-0	0.553	JB	10.7	0.0612	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.422				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	41	25 - 181
13C12-123478-HxCDD	57	32 - 141
13C12-123678-HxCDD	55	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	53	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	44	24 - 185
13C12-23478-PeCDF	45	21 - 178
13C12-123478-HxCDF	54	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	59	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	46	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 01:31	Sara E Johnson	0.97
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 17:49	Jason M Long	24.32
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	3	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	4	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201331933144	11/15/2013 20:22	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	2	201331933144	11/15/2013 20:22	Mitchell R Washel	n.a.
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 23:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 10:52	Laura M Krieger	25.25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:56	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:56	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/21/2013 23:59	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 05:20	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 10:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 10:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-821-SA5A-SB-11.0-12.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279115
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:25

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2912 SDG#: PH129-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 13:33	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 11:59	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 11:59	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 11:59	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 11:59	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 19:52	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401B	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	21	U	21	7	0.95
10237	Acrolein	107-02-8	110	U	110	21	0.95
10237	Acrylonitrile	107-13-1	21	U	21	4	0.95
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.95
10237	Benzene	71-43-2	5	U	5	0.5	0.95
10237	Bromobenzene	108-86-1	5	U	5	1	0.95
10237	Bromochloromethane	74-97-5	5	U	5	1	0.95
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.95
10237	Bromoform	75-25-2	5	U	5	1	0.95
10237	Bromomethane	74-83-9	5	U	5	2	0.95
10237	2-Butanone	78-93-3	11	U	11	4	0.95
10237	t-Butyl alcohol	75-65-0	53	U	53	21	0.95
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.95
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.95
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.95
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.95
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.95
10237	Chlorobenzene	108-90-7	5	U	5	1	0.95
10237	Chloroethane	75-00-3	5	U	5	2	0.95
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	0.95
10237	Chloroform	67-66-3	5	U	5	1	0.95
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.95
10237	Chloromethane	74-87-3	5	U	5	2	0.95
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.95
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.95
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.95
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.95
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.95
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.95
10237	Dibromomethane	74-95-3	5	U	5	1	0.95
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.95
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.95
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.95
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.95
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.95
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.95
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.95
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.95
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.95
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.95
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.95
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.95
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.95
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.95
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.95
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.95
10237	Ethylbenzene	100-41-4	5	U	5	1	0.95
10237	Freon 113	76-13-1	5	U	5	2	0.95
10237	Freon 133a	75-88-7	5	U	5	2	0.95
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.95
10237	2-Hexanone	591-78-6	11	U	11	3	0.95

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.95
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.95
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.95
10237	Methyl Iodide	74-88-4	5	U	5	3	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.95
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	0.95
10237	Methylene Chloride	75-09-2	5	U	5	2	0.95
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.95
10237	Styrene	100-42-5	5	U	5	1	0.95
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.95
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.95
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.95
10237	Toluene	108-88-3	5	U	5	1	0.95
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.95
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.95
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.95
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.95
10237	Trichloroethene	79-01-6	5	U	5	1	0.95
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.95
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.95
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.95
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.95
10237	Vinyl Acetate	108-05-4	11	U	11	2	0.95
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.95
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.95
10237	o-Xylene	95-47-6	5	U	5	1	0.95
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	17	U	17	5.6	25.2
The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.							
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.2	J	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	3.0		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Morpholine	110-91-8	22	U	22	22	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	2.1		1.8	0.73	1
12969	Pyrene	129-00-0	1.7	J	1.8	0.73	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	24.8
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	2,200	U	2,200	1,300	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	7.9		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	15		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,800		43.1	7.78	1
06944	Antimony	7440-36-0	4.31	U	4.31	0.798	1
06935	Arsenic	7440-38-2	6.69		4.31	0.755	1
06946	Barium	7440-39-3	97.3		1.08	0.0356	1
06947	Beryllium	7440-41-7	0.807	J	1.08	0.0723	1
07914	Boron	7440-42-8	2.70	J	10.8	0.906	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0820	1
01650	Calcium	7440-70-2	3,400		21.6	3.60	1
06951	Chromium	7440-47-3	20.6		3.24	0.173	1
06952	Cobalt	7440-48-4	4.45		1.08	0.107	1
06953	Copper	7440-50-8	7.21		2.16	0.313	1
01654	Iron	7439-89-6	26,200		43.1	3.91	1
06955	Lead	7439-92-1	7.33		3.24	0.539	1
01656	Lithium	7439-93-2	23.5		4.3	0.37	1
01657	Magnesium	7439-95-4	4,750		10.8	1.80	1
06958	Manganese	7439-96-5	207		1.08	0.0895	1
06960	Molybdenum	7439-98-7	0.232	J	2.16	0.183	1
06961	Nickel	7440-02-0	9.45		2.16	0.140	1
10145	Phosphorus	7723-14-0	233		10.8	3.12	1
01662	Potassium	7440-09-7	1,400		108	9.00	1
01667	Sodium	7440-23-5	143		108	18.0	1
06969	Tin	7440-31-5	3.33	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,150		1.08	0.183	1
06971	Vanadium	7440-62-2	46.4		1.08	0.140	1
06972	Zinc	7440-66-6	43.1		4.31	0.216	1
10146	Zirconium	7440-67-7	4.06	J	5.39	0.906	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.208	J	0.431	0.108	2
06142	Silver	7440-22-4	0.0550	J	0.216	0.0280	2
06144	Strontium	7440-24-6	25.2		0.431	0.0734	2
06145	Thallium	7440-28-0	0.233		0.216	0.0324	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0181	U	0.0181	0.0109	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.44	J	0.45	0.16	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.63		0.0100	0.0100	1
	The pH was measured in water at 19.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.109	JQ	1.09	0.0478	1
11031	12378-PeCDD	40321-76-4	0.124	JBQ	5.43	0.0717	1
11031	123478-HxCDD	39227-28-6	0.102	JB	5.43	0.0448	1
11031	123678-HxCDD	57653-85-7	0.185	JBQ	5.43	0.0472	1
11031	123789-HxCDD	19408-74-3	0.121	JBQ	5.43	0.0403	1
11031	1234678-HpCDD	35822-46-9	0.971	JBQ	5.43	0.0574	1
11031	OCDD	3268-87-9	8.66	JB	10.9	0.0518	1
11031	2378-TCDF	51207-31-9	1.09	U	1.09	0.0524	1
11031	12378-PeCDF	57117-41-6	0.131	JBQ	5.43	0.0382	1
11031	23478-PeCDF	57117-31-4	0.135	JBQ	5.43	0.0378	1
11031	123478-HxCDF	70648-26-9	0.119	JBQ	5.43	0.0397	1
11031	123678-HxCDF	57117-44-9	0.143	JB	5.43	0.0372	1
11031	123789-HxCDF	72918-21-9	0.103	JBQ	5.43	0.0267	1
11031	234678-HxCDF	60851-34-5	0.126	JBQ	5.43	0.0349	1
11031	1234678-HpCDF	67562-39-4	0.232	JB	5.43	0.0200	1
11031	1234789-HpCDF	55673-89-7	0.0604	JBQ	5.43	0.0246	1
11031	OCDF	39001-02-0	0.518	JBQ	10.9	0.0718	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0293				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	38	25 - 181
13C12-123478-HxCDD	45	32 - 141
13C12-123678-HxCDD	44	28 - 130
13C12-123789-HxCDD	49	28 - 130
13C12-1234678-HpCDD	41	23 - 140
13C12-OCDD	40	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	45	24 - 185
13C12-23478-PeCDF	42	21 - 178
13C12-123478-HxCDF	42	26 - 152
13C12-123678-HxCDF	43	26 - 123
13C12-234678-HxCDF	47	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	43	28 - 143
13C12-1234789-HpCDF	36	26 - 138
13C12-OCDF	34	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 01:54	Sara E Johnson	0.95
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 18:10	Jason M Long	25.2
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	3	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035A	4	201331933144	11/15/2013 20:28	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201331933144	11/15/2013 20:25	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	2	201331933144	11/15/2013 20:26	Mitchell R Washel	n.a.
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13323SLI026	11/26/2013 23:35	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13323SLI026	11/20/2013 08:15	Joseph S Feister	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13323A16A	11/21/2013 11:30	Laura M Krieger	24.8
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201331933144	11/15/2013 20:58	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201331933144	11/15/2013 20:59	Mitchell R Washel	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133220001A	11/22/2013 00:07	James H Place	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133250033A	11/26/2013 05:39	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133250033A	11/22/2013 07:50	Olivia Arosemena	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133220001A	11/18/2013 15:00	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133240037A	11/23/2013 11:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133240037A	11/21/2013 09:30	David S Schrum	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13328002	11/27/2013 11:20	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13328002	11/24/2013 13:20	Robert Brown	1
01643	Aluminum	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-521-SA5A-SB-14.0-15.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7279116
LL Group # 1434351
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/14/2013 14:35

Submitted: 11/15/2013 09:15
Reported: 12/12/2013 09:12

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

P2913 SDG#: PH129-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133270637001	11/26/2013 14:00	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133270637001B	11/27/2013 12:02	John P Hook	2
06142	Silver	SW-846 6020A	1	133270637001A	11/27/2013 12:02	John P Hook	2
06144	Strontium	SW-846 6020A	1	133270637001A	11/27/2013 12:02	John P Hook	2
06145	Thallium	SW-846 6020A	1	133270637001A	11/27/2013 12:02	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133270638001	11/26/2013 10:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133270637001	11/25/2013 11:10	James L Mertz	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133270638001	11/25/2013 12:36	James L Mertz	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13329243201A	11/26/2013 20:15	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13319039401B	11/15/2013 19:45	Michelle L Lalli	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13329243201A	11/25/2013 15:25	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13323162401B	11/19/2013 11:40	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B133252AA	Sample number(s): 7279108-7279110,7279115-7279116									
Acetone	20	U	20.	7	ug/kg	98		23-171		
Acrolein	100 U		100.	20	ug/kg	77		50-137		
Acrylonitrile	20	U	20.	4	ug/kg	94		58-123		
t-Amyl methyl ether	5	U	5.	1	ug/kg	87		63-130		
Benzene	5	U	5.	0.5	ug/kg	93		80-120		
Bromobenzene	5	U	5.	1	ug/kg	89		80-120		
Bromochloromethane	5	U	5.	1	ug/kg	104		75-129		
Bromodichloromethane	5	U	5.	1	ug/kg	91		75-120		
Bromoform	5	U	5.	1	ug/kg	95		70-120		
Bromomethane	5	U	5.	2	ug/kg	102		32-162		
2-Butanone	10	U	10.	4	ug/kg	96		38-146		
t-Butyl alcohol	50	U	50.	20	ug/kg	93		60-149		
n-Butylbenzene	5	U	5.	1	ug/kg	91		72-120		
sec-Butylbenzene	5	U	5.	1	ug/kg	89		75-120		
tert-Butylbenzene	5	U	5.	1	ug/kg	86		75-120		
Carbon Disulfide	5	U	5.	1	ug/kg	90		63-128		
Carbon Tetrachloride	5	U	5.	1	ug/kg	94		69-122		
Chlorobenzene	5	U	5.	1	ug/kg	96		80-120		
Chloroethane	5	U	5.	2	ug/kg	96		17-171		
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/kg	61		44-137		
Chloroform	5	U	5.	1	ug/kg	98		80-120		
1-Chlorohexane	5	U	5.	1	ug/kg	98		70-130		
Chloromethane	5	U	5.	2	ug/kg	95		56-120		
2-Chlorotoluene	5	U	5.	1	ug/kg	92		78-120		
4-Chlorotoluene	5	U	5.	1	ug/kg	89		79-120		
Chlorotrifluoroethene	5	U	5.	2	ug/kg	90		22-131		
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/kg	96		55-128		
Dibromochloromethane	5	U	5.	1	ug/kg	94		77-120		
1,2-Dibromoethane	5	U	5.	1	ug/kg	96		80-120		
Dibromomethane	5	U	5.	1	ug/kg	96		80-120		
1,2-Dichlorobenzene	5	U	5.	1	ug/kg	93		80-120		
1,3-Dichlorobenzene	5	U	5.	1	ug/kg	91		80-120		
1,4-Dichlorobenzene	5	U	5.	1	ug/kg	92		80-120		
Dichlorodifluoromethane	5	U	5.	2	ug/kg	88		32-120		
1,1-Dichloroethane	5	U	5.	1	ug/kg	97		80-120		
1,2-Dichloroethane	5	U	5.	1	ug/kg	101		72-126		
1,1-Dichloroethene	5	U	5.	1	ug/kg	100		73-129		
cis-1,2-Dichloroethene	5	U	5.	1	ug/kg	93		80-120		
trans-1,2-Dichloroethene	5	U	5.	1	ug/kg	99		79-120		
1,2-Dichloropropane	5	U	5.	1	ug/kg	96		77-120		
1,3-Dichloropropane	5	U	5.	1	ug/kg	94		80-120		
2,2-Dichloropropane	5	U	5.	1	ug/kg	90		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	91		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	93		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	84		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	86		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	92		80-120		
Freon 113	5	U	5.	2	ug/kg	83		64-137		
Freon 133a	5	U	5.	2	ug/kg	107		78-120		
Hexachlorobutadiene	5	U	5.	2	ug/kg	90		46-130		
2-Hexanone	10	U	10.	3	ug/kg	81		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	93		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	93		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	90		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	101		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	99		69-126		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	82		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	105		80-124		
n-Propylbenzene	5	U	5.	1	ug/kg	96		77-120		
Styrene	5	U	5.	1	ug/kg	96		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	90		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	94		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	104		78-126		
Toluene	5	U	5.	1	ug/kg	94		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	85		68-120		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	104		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	98		80-120		
Trichloroethene	5	U	5.	1	ug/kg	96		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	94		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	95		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	92		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	92		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	152*		40-127		
Vinyl Chloride	5	U	5.	1	ug/kg	97		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	95		80-120		
o-Xylene	5	U	5.	1	ug/kg	90		80-120		
Batch number: E133241AA	Sample number(s): 7279098,7279105									
1,4-Dioxane	2.0	U	2.0	0.5	ug/l	99		80-123		
Batch number: E133291AA	Sample number(s): 7279108-7279110,7279115-7279116									
1,4-Dioxane	15	U	15.	5.0	ug/kg	101	108	70-130	7	30
Batch number: Y133301AA	Sample number(s): 7279098,7279105									
Acetone	20	U	20.	6	ug/l	80	79	38-157	2	30
Acrolein	100 U		100.	40	ug/l	68	69	46-146	2	30
Acrylonitrile	20	U	20.	4	ug/l	82	80	61-130	2	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	89	89	75-120	0	30
Benzene	5	U	5.	0.5	ug/l	102	101	78-120	1	30
Bromobenzene	5	U	5.	1	ug/l	96	95	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	104	102	80-121	2	30
Bromodichloromethane	5	U	5.	1	ug/l	91	89	73-120	2	30
Bromoform	5	U	5.	1	ug/l	82	81	61-120	1	30
Bromomethane	5	U	5.	1	ug/l	74	73	51-120	1	30
2-Butanone	10	U	10.	3	ug/l	81	80	58-126	2	30
t-Butyl alcohol	50	U	50.	10	ug/l	89	89	75-120	0	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
n-Butylbenzene	5	U	5.	1	ug/l	97	96	80-120	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	102	101	80-120	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	96	96	80-120	1	30
Carbon Disulfide	5	U	5.	1	ug/l	75	75	58-126	0	30
Carbon Tetrachloride	5	U	5.	1	ug/l	98	97	74-130	1	30
Chlorobenzene	5	U	5.	0.8	ug/l	102	101	80-120	1	30
Chloroethane	5	U	5.	1	ug/l	65	66	45-120	2	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	90	90	59-126	0	30
Chloroform	5	U	5.	0.8	ug/l	102	101	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	102	102	70-130	0	30
Chloromethane	5	U	5.	1	ug/l	89	87	55-120	2	30
2-Chlorotoluene	5	U	5.	1	ug/l	98	97	80-120	1	30
4-Chlorotoluene	5	U	5.	1	ug/l	97	96	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	87	87	47-120	0	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	79	78	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	91	89	72-120	3	30
1,2-Dibromoethane	5	U	5.	1	ug/l	97	95	76-120	1	30
Dibromomethane	5	U	5.	1	ug/l	93	91	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	101	99	80-120	2	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	99	98	80-120	1	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	90	88	35-122	2	30
1,1-Dichloroethane	5	U	5.	1	ug/l	100	100	80-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	98	97	71-130	1	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	95	95	76-124	0	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	102	101	80-120	1	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	104	102	80-120	2	30
1,2-Dichloropropane	5	U	5.	1	ug/l	101	101	80-120	0	30
1,3-Dichloropropane	5	U	5.	1	ug/l	95	94	80-120	1	30
2,2-Dichloropropane	5	U	5.	1	ug/l	89	87	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	106	105	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	95	94	80-120	1	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	90	89	69-120	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	91	90	74-120	1	30
Ethylbenzene	5	U	5.	0.8	ug/l	98	98	79-120	1	30
Freon 113	5	U	5.	2	ug/l	101	99	63-133	2	30
Freon 133a	5	U	5.	2	ug/l	97	97	64-120	0	30
Hexachlorobutadiene	5	U	5.	2	ug/l	84	83	50-133	1	30
2-Hexanone	10	U	10.	3	ug/l	78	77	59-125	2	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	95	94	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	99	99	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	96	96	80-120	1	30
Methyl Iodide	5	U	5.	1	ug/l	96	95	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	98	96	75-120	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	83	82	59-120	1	30
Methylene Chloride	5	U	5.	2	ug/l	99	98	80-120	1	30
n-Propylbenzene	5	U	5.	1	ug/l	103	102	80-120	1	30
Styrene	5	U	5.	1	ug/l	96	94	80-120	2	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	95	94	80-120	1	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	92	91	70-120	1	30
Tetrachloroethene	5	U	5.	0.8	ug/l	103	101	80-120	2	30
Toluene	5	U	5.	0.7	ug/l	103	101	80-120	2	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	88	88	58-126	0	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	88	88	65-120	0	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	92	92	66-126	0	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	98	96	80-120	1	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Trichloroethene	5	U	5.	1	ug/l	103	103	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	92	90	65-130	2	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	89	87	76-120	2	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	100	99	74-120	1	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	100	99	74-120	1	30
Vinyl Acetate	10	U	10.	2	ug/l	110	109	56-135	1	30
Vinyl Chloride	5	U	5.	1	ug/l	93	91	63-120	2	30
m+p-Xylene	5	U	5.	0.8	ug/l	100	99	80-120	1	30
o-Xylene	5	U	5.	0.8	ug/l	98	97	80-120	1	30
Batch number: 13322WAA026	Sample number(s): 7279098									
Acenaphthene	0.050	U	0.050	0.010	ug/l	105	104	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	108	106	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	107	106	78-123	1	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	109	104	73-127	5	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	93	72-120	11	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	112	105	79-136	7	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	95	85	70-130	11	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	106	87	64-130	20	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	105	97	73-131	8	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	100	96	40-138	4	30
Di-n-butylphthalate	0.057	J	1.0	0.050	ug/l	113	110	64-141	2	30
Chrysene	0.050	U	0.050	0.010	ug/l	105	103	76-125	3	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	104	93	58-131	12	30
Diethylphthalate	0.056	J	1.0	0.050	ug/l	111	108	64-128	3	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	106	102	23-139	4	30
Bis(2-Ethylhexyl)phthalate	0.096	J	1.0	0.050	ug/l	88	103	70-143	16	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	107	105	79-124	2	30
Fluorene	0.050	U	0.050	0.010	ug/l	104	104	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	106	92	62-130	13	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	109	108	80-126	1	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	108	106	81-124	1	30
Morpholine	20	U	20.	20	ug/l					
Naphthalene	0.050	U	0.050	0.030	ug/l	107	106	75-120	1	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	79	82	36-120	4	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	81	93	57-145	14	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	104	103	75-120	1	30
Pyrene	0.050	U	0.050	0.010	ug/l	107	107	71-130	1	30
Batch number: 13323SLI026	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	100		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	87		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	91		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	88		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	86		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	94		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	78*		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	91		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	86		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	85		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	90		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	90		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	94		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	90		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	86		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	78*		79-121		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	1.7	U	1.7	0.67	ug/kg	95		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	92		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	91		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	93		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	95		78-121		
Morpholine	20	U	20.	20	ug/kg					
Naphthalene	1.7	U	1.7	0.67	ug/kg	97		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	88		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	75*		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	93		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	91		79-112		
Batch number: 13323A16A	Sample number(s): 7279100-7279104,7279107-7279110,7279115-7279116									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	79		67-119		
Batch number: 13325A94A	Sample number(s): 7279098,7279105									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	103	75-135	3	30
Batch number: 133200003A	Sample number(s): 7279098									
Formaldehyde	50	U	50.	30	ug/l	82	82	69-130	0	30
Batch number: 133220001A	Sample number(s): 7279106-7279110,7279115-7279116									
Formaldehyde	2,000 U		2,000.	1,200	ug/kg	104		69-141		
Batch number: 133220007A	Sample number(s): 7279098									
Aldrin	0.0080	U	0.0080	0.0016	ug/l	66	70	45-125	5	30
Alpha BHC	0.0080	U	0.0080	0.0024	ug/l	80	83	51-139	3	30
Beta BHC	0.0080	U	0.0080	0.0027	ug/l	80	82	57-127	3	30
Gamma BHC - Lindane	0.0080	U	0.0080	0.0016	ug/l	77	79	57-133	3	30
Chlordane	0.40	U	0.40	0.13	ug/l					
p,p-DDD	0.016	U	0.016	0.0040	ug/l	77	81	55-145	5	30
p,p-DDE	0.016	U	0.016	0.0040	ug/l	78	79	58-130	2	30
p,p-DDT	0.016	U	0.016	0.0042	ug/l	78	79	45-140	2	30
Delta BHC	0.0080	U	0.0080	0.0027	ug/l	79	82	52-133	4	30
Dieldrin	0.016	U	0.016	0.0042	ug/l	79	83	60-135	5	30
Endosulfan I	0.0080	U	0.0080	0.0034	ug/l	75	80	56-128	6	30
Endosulfan II	0.016	U	0.016	0.012	ug/l	78	83	53-123	6	30
Endosulfan Sulfate	0.016	U	0.016	0.0046	ug/l	78	79	51-130	1	30
Endrin	0.016	U	0.016	0.0065	ug/l	78	79	43-139	1	30
Endrin Aldehyde	0.080	U	0.080	0.016	ug/l	76	77	50-122	1	20
Endrin Ketone	0.016	U	0.016	0.0040	ug/l	75	80	51-133	6	30
Heptachlor	0.0080	U	0.0080	0.0016	ug/l	72	75	48-130	5	30
Heptachlor Epoxide	0.0080	U	0.0080	0.0018	ug/l	78	82	65-128	4	30
Methoxychlor	0.080	U	0.080	0.024	ug/l	84	86	40-150	3	30
Mirex	0.040	U	0.040	0.0080	ug/l					
Toxaphene	0.80	U	0.80	0.24	ug/l					
Batch number: 133220008A	Sample number(s): 7279098									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	74	73	35-84	1	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	91	99	67-117	9	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	85	104	67-128	21	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 133250033A	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	86	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	109		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	132*		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133230036A	Sample number(s): 7279098									
Ethanol	1,000 U		1,000.	200	ug/l	94	90	78-116	4	20
Isopropanol	1,000 U		1,000.	200	ug/l	91	90	67-120	1	20
Methanol	1,000 U		1,000.	200	ug/l	99	94	79-120	5	20
Batch number: 133220028A	Sample number(s): 7279098									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	76	84	70-130	10	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	84	90	70-130	8	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	82	89	70-130	8	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	45*	56*	70-130	23	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	55*	65*	70-130	16	30
Batch number: 133240037A	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	85		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	88		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	86		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	66		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	70		60-115		
Batch number: 133240635002	Sample number(s): 7279098									
Aluminum	0.400	U	0.400	0.0828	mg/l	103	103	90-112	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	106	106	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	99	90-111	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	100	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	101	101	90-112	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	101	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	102	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	103	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	103	102	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	103	103	88-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	102	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	100	101	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	102	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	103	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	102	101	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	100	99	90-110	1	20
Sodium	2.00	U	2.00	0.167	mg/l	101	101	87-114	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	101	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	103	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	101	100	90-110	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	104	104	90-110	0	20
Batch number: 133240639002A	Sample number(s): 7279098									
Silver	0.0010	U	0.0010	0.00011	mg/l	100	103	90-115	3	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	102	100	90-110	2	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	104	104	90-115	0	20
Batch number: 133240639002B	Sample number(s): 7279098									
Selenium	0.0040	U	0.0040	0.00050	mg/l	98	108	90-120	9	20
Batch number: 133255713006	Sample number(s): 7279098									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	99	105	90-115	6	20
Batch number: 133270637001	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116									
Aluminum	40.0	U	40.0	7.21	mg/kg	109		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	103		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	106		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	104		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	102		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	110		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	106		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	106		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	107		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	105		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	108		80-120		
Potassium	100 U		100.	8.34	mg/kg	104		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.63	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	104		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	104		80-120		
Zinc	0.483	J	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133270637001A	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116								
Silver	0.200 U	0.200	0.0260	mg/kg	114		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	110		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	111		80-120		
Batch number: 133270637001B	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116								
Selenium	0.400 U	0.400	0.100	mg/kg	111		80-120		
Batch number: 133270638001	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	91		85-120		
Batch number: 13319987301B	Sample number(s): 7279098								
2b Chromium VI by EPA 7199	10.0 U	10.0	5.0	ug/l	102	96	90-110	6	20
Batch number: 13329243201A	Sample number(s): 7279106-7279108,7279111-7279116								
2a Chromium VI by EPA 7199	0.40 U	0.40	0.14	mg/kg	98		80-120		
Batch number: 13319039401A	Sample number(s): 7279099-7279104,7279106-7279108,7279114								
15a pH by 9045D					99		95-105		
Batch number: 13319039401B	Sample number(s): 7279115-7279116								
15a pH by 9045D					99		95-105		
Batch number: 13320121521A	Sample number(s): 7279098								
28b pH (9040B and 9040C)					99		93-106		
Batch number: 13323162401B	Sample number(s): 7279099-7279104,7279106-7279116								
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		
14a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13328002	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116								
2378-TCDD	1.00 U	1.00	0.0679	ng/kg	94		67-158		
12378-PeCDD	0.0779 J	5.00	0.0627	ng/kg	101		70-142		
123478-HxCDD	0.0654 J	5.00	0.0397	ng/kg	108		70-164		
123678-HxCDD	0.0847 J	5.00	0.0410	ng/kg	109		76-134		
123789-HxCDD	0.0729 J	5.00	0.0479	ng/kg	107		64-162		
1234678-HpCDD	0.0987 J	5.00	0.0521	ng/kg	104		70-140		
OCDD	0.307 J	10.0	0.0503	ng/kg	101		78-144		
2378-TCDF	1.00 U	1.00	0.0686	ng/kg	102		75-158		
12378-PeCDF	0.0936 J	5.00	0.0391	ng/kg	105		80-134		
23478-PeCDF	0.0865 J	5.00	0.0354	ng/kg	111		68-160		
123478-HxCDF	0.133 J	5.00	0.0353	ng/kg	107		72-134		
123678-HxCDF	0.0480 J	5.00	0.0330	ng/kg	110		84-130		
123789-HxCDF	0.120 J	5.00	0.0351	ng/kg	108		78-130		
234678-HxCDF	0.0813 J	5.00	0.0363	ng/kg	106		70-156		
1234678-HpCDF	0.0578 J	5.00	0.0160	ng/kg	106		82-122		
1234789-HpCDF	0.154 J	5.00	0.0247	ng/kg	109		78-138		
OCDF	0.343 J	10.0	0.0889	ng/kg	103		63-170		
Batch number: 13329002	Sample number(s): 7279098								
2378-TCDD	2.00 U	2.00	0.344	pg/l	104		60-150		

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Quality Control Summary

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Reported: 12/12/13 at 09:12 AM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
12378-PeCDD	0.350	J	10.0	0.310	pg/l	103		60-150		
123478-HxCDD	0.322	J	10.0	0.222	pg/l	108		60-150		
123678-HxCDD	10.0	U	10.0	0.234	pg/l	106		60-150		
123789-HxCDD	0.369	J	10.0	0.233	pg/l	109		60-150		
1234678-HpCDD	0.418	J	10.0	0.284	pg/l	106		60-150		
OCDD	2.83	J	20.0	0.323	pg/l	104		60-150		
2378-TCDF	2.00	U	2.00	0.248	pg/l	102		60-150		
12378-PeCDF	0.428	J	10.0	0.167	pg/l	107		60-150		
23478-PeCDF	0.199	J	10.0	0.151	pg/l	107		60-150		
123478-HxCDF	0.397	J	10.0	0.144	pg/l	105		60-150		
123678-HxCDF	0.306	J	10.0	0.152	pg/l	104		60-150		
123789-HxCDF	0.540	J	10.0	0.171	pg/l	106		60-150		
234678-HxCDF	0.378	J	10.0	0.143	pg/l	105		60-150		
1234678-HpCDF	0.902	J	10.0	0.0925	pg/l	105		60-150		
1234789-HpCDF	0.464	J	10.0	0.119	pg/l	103		60-150		
OCDF	1.52	J	20.0	0.469	pg/l	101		60-150		
Batch number: 13328002	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116									
TEQ WHO 2005 - EDLx0.0	0.0190				ng/kg					
Batch number: 13329002	Sample number(s): 7279098									
TEQ WHO 2005 - EDLx0.0	0.0598				pg/l					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B133252AA	Sample number(s): 7279108-7279110,7279115-7279116 UNSPK: 7279108								
Acetone	88	98	31-195	9	30				
Acrolein	103	101	10-165	3	30				
Acrylonitrile	94	104	48-139	9	30				
t-Amyl methyl ether	95	104	50-132	8	30				
Benzene	107	112	55-143	3	30				
Bromobenzene	103	108	43-139	4	30				
Bromochloromethane	125	125	60-137	1	30				
Bromodichloromethane	103	109	53-136	5	30				
Bromoform	101	108	38-124	6	30				
Bromomethane	121	124	42-168	2	30				
2-Butanone	95	106	37-163	10	30				
t-Butyl alcohol	116	124	47-153	6	30				
n-Butylbenzene	108	115	30-146	5	30				
sec-Butylbenzene	109	115	33-157	4	30				
tert-Butylbenzene	106	109	41-152	2	30				
Carbon Disulfide	108	114	48-146	4	30				
Carbon Tetrachloride	113	120	45-153	5	30				
Chlorobenzene	108	109	49-135	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloroethane	114	118	39-152	3	30				
2-Chloroethyl Vinyl Ether	70	71	32-139	0	30				
Chloroform	112	118	61-142	4	30				
1-Chlorohexane	106	104	70-130	3	30				
Chloromethane	118	123	36-143	3	30				
2-Chlorotoluene	107	110	42-146	3	30				
4-Chlorotoluene	105	110	39-145	3	30				
Chlorotrifluoroethene	31*	26*	70-130	17	30				
1,2-Dibromo-3-chloropropane	92	102	30-139	9	30				
Dibromochloromethane	103	110	51-128	6	30				
1,2-Dibromoethane	103	111	54-129	7	30				
Dibromomethane	107	113	57-130	5	30				
1,2-Dichlorobenzene	105	109	36-133	3	30				
1,3-Dichlorobenzene	105	111	34-134	5	30				
1,4-Dichlorobenzene	105	110	35-136	4	30				
Dichlorodifluoromethane	130	134	26-151	3	30				
1,1-Dichloroethane	111	118	63-142	5	30				
1,2-Dichloroethane	109	117	54-143	6	30				
1,1-Dichloroethene	122	128	61-149	4	30				
cis-1,2-Dichloroethene	108	114	53-146	5	30				
trans-1,2-Dichloroethene	111	115	51-153	3	30				
1,2-Dichloropropane	111	114	54-144	2	30				
1,3-Dichloropropane	105	109	51-140	3	30				
2,2-Dichloropropane	108	113	53-147	4	30				
1,1-Dichloropropene	111	116	54-145	4	30				
cis-1,3-Dichloropropene	107	112	45-137	4	30				
trans-1,3-Dichloropropene	97	103	41-129	5	30				
Ethyl t-butyl ether	95	104	58-124	8	30				
Ethylbenzene	109	112	44-141	2	30				
Freon 113	118	122	56-156	3	30				
Freon 133a	95	94	61-131	2	30				
Hexachlorobutadiene	91	100	10-155	8	30				
2-Hexanone	75	86	32-160	13	30				
di-Isopropyl ether	105	113	59-133	7	30				
Isopropylbenzene	108	111	38-144	2	30				
p-Isopropyltoluene	108	113	29-152	4	30				
Methyl Iodide	118	123	52-139	4	30				
Methyl Tertiary Butyl Ether	100	110	55-129	8	30				
4-Methyl-2-pentanone	79	87	46-139	8	30				
Methylene Chloride	118	128	60-149	7	30				
n-Propylbenzene	114	120	39-157	4	30				
Styrene	108	113	35-134	4	30				
1,1,1,2-Tetrachloroethane	103	107	39-150	2	30				
1,1,2,2-Tetrachloroethane	101	112	40-152	9	30				
Tetrachloroethene	117	124	42-149	5	30				
Toluene	109	114	50-146	3	30				
1,2,3-Trichlorobenzene	88	99	10-140	11	30				
1,2,4-Trichlorobenzene	88	96	10-136	8	30				
1,1,1-Trichloroethane	125	129	52-146	3	30				
1,1,2-Trichloroethane	109	115	47-161	4	30				
Trichloroethene	110	116	53-144	4	30				
Trichlorofluoromethane	125	130	47-163	3	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2,3-Trichloropropane	103	111	36-180	7	30				
1,2,4-Trimethylbenzene	109	115	37-149	4	30				
1,3,5-Trimethylbenzene	109	112	38-150	2	30				
Vinyl Acetate	110	83	21-139	30	30				
Vinyl Chloride	121	129	50-154	6	30				
m+p-Xylene	110	113	44-137	2	30				
o-Xylene	104	107	42-137	2	30				
Batch number: E133241AA	Sample number(s): 7279098,7279105 UNSPK: P279164								
1,4-Dioxane	95	93	73-138	1	30				
Batch number: E133291AA	Sample number(s): 7279108-7279110,7279115-7279116 UNSPK: 7279108								
1,4-Dioxane	82	89	70-130	3	30				
Batch number: 13323SLI026	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116 UNSPK: 7279108								
Acenaphthene	115	120	48-127	4	30				
Acenaphthylene	85	95	49-121	11	30				
Anthracene	98	105	52-126	7	30				
Benzo(a)anthracene	98	99	44-143	1	30				
Benzo(a)pyrene	94	96	44-140	2	30				
Benzo(b)fluoranthene	97	102	26-142	4	30				
Benzo(e)pyrene	86	88	70-130	2	30				
Benzo(g,h,i)perylene	133	98	33-141	31*	30				
Benzo(k)fluoranthene	97	97	54-142	0	30				
Butylbenzylphthalate	91	95	49-151	3	30				
Di-n-butylphthalate	101	102	52-147	1	30				
Chrysene	100	98	29-148	2	30				
Dibenz(a,h)anthracene	103	105	20-137	1	30				
Diethylphthalate	102	103	43-145	0	30				
Dimethylphthalate	88	98	58-129	10	30				
Bis(2-Ethylhexyl)phthalate	94	97	39-167	2	30				
Fluoranthene	103	110	40-148	6	30				
Fluorene	98	104	51-137	5	30				
Indeno(1,2,3-cd)pyrene	100	102	17-136	1	30				
1-Methylnaphthalene	106	109	50-131	2	30				
2-Methylnaphthalene	96	114	35-152	16	30				
Naphthalene	104	103	31-148	1	30				
N-Nitrosodimethylamine	102	97	48-113	6	30				
Di-n-octylphthalate	91	139	52-162	42*	30				
Phenanthrene	100	118	29-142	17	30				
Pyrene	94	98	26-143	4	30				
Batch number: 13323A16A	Sample number(s): 7279100-7279104,7279107-7279110,7279115-7279116 UNSPK: 7279108								
11a TPH by EPA 8015B GRO	69	75	69-123	8	30				
Batch number: 133220001A	Sample number(s): 7279106-7279110,7279115-7279116 UNSPK: 7279108								
Formaldehyde	78	91	66-134	6	50				
Batch number: 133250033A	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116 UNSPK: 7279108								
PCB-1016	93	98	41-135	5	50				
PCB-1260	116	122	40-134	5	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 133240037A	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116 UNSPK: 7279108										
EFH (C12-C14)	85	83	49-123	3	20						
EFH (C15-C20)	110	89	49-123	22*	20						
EFH (C21-C30)	122	62	49-123	45*	20						
EFH (C30-C40)	75	24*	49-123	42*	20						
EFH (C8-C11)	75	77	49-123	2	20						
Batch number: 133270637001	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116 UNSPK: 7279108 BKG: 7279108										
Aluminum	287 (2)	2155 (2)	75-125	22*	20	14,100		15,000		7	20
Antimony	66*	56*	75-125	16	20	3.96	U	3.88	U	0 (1)	20
Arsenic	99	101	75-125	1	20	3.91	J	3.86	J	1 (1)	20
Barium	91	103	75-125	8	20	94.2		102		8	20
Beryllium	102	106	75-125	4	20	0.510	J	0.564	J	10 (1)	20
Boron	100	100	75-125	0	20	3.57	J	3.40	J	5 (1)	20
Cadmium	99	98	75-125	1	20	0.990	U	0.971	U	0 (1)	20
Calcium	286 (2)	125 (2)	75-125	22*	20	2,050		2,110		3	20
Chromium	94	101	75-125	4	20	15.0		15.7		4	20
Cobalt	98	100	75-125	2	20	4.97		5.18		4	20
Copper	95	100	75-125	4	20	8.69		9.54		9 (1)	20
Iron	-67 (2)	804 (2)	75-125	5	20	16,900		17,600		5	20
Lead	125	100	75-125	16	20	5.30		5.56		5 (1)	20
Lithium	105	106	75-125	1	20	19.2		20.4		6 (1)	20
Magnesium	206 (2)	149 (2)	75-125	3	20	3,470		3,650		5	20
Manganese	-130 (2)	-59 (2)	75-125	12	20	328		355		8	20
Molybdenum	99	98	75-125	1	20	0.383	J	0.331	J	15 (1)	20
Nickel	96	100	75-125	3	20	10.0		9.84		2	20
Phosphorus	42*	1*	75-125	12	20	309		316		2	20
Potassium	80	73*	75-125	2	20	2,910		3,130		7	20
Sodium	105	104	75-125	0	20	107		114		7 (1)	20
Tin	94	93	75-125	1	20	2.49	J	2.47	J	1 (1)	20
Titanium	267 (2)	291 (2)	75-125	2	20	944		1,010		6	20
Vanadium	102	111	75-125	5	20	28.1		30.3		8	20
Zinc	98	94	75-125	2	20	48.8		51.2		5	20
Zirconium	98	98	75-125	0	20	3.55	J	3.83	J	8 (1)	20
Batch number: 133270637001A	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116 UNSPK: 7279108 BKG: 7279108										
Silver	114	110	75-125	3	20	0.0398	J	0.0350	J	13 (1)	20
Strontium	99	125	75-125	7	20	20.0		21.5		7	20
Thallium	117	111	75-125	4	20	0.230		0.244		6 (1)	20
Batch number: 133270637001B	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116 UNSPK: 7279108 BKG: 7279108										
Selenium	108	102	75-125	5	20	0.139	J	0.153	J	10 (1)	20
Batch number: 133270638001	Sample number(s): 7279099-7279104,7279106-7279110,7279114-7279116 UNSPK: 7279108 BKG: 7279108										
3a Mercury 7471A	95	90	65-135	8	20	0.0155	U	0.0163	U	0 (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13329243201A	Sample number(s): 7279106-7279108,7279111-7279116 UNSPK: 7279108 BKG: 7279108								
2a Chromium VI by EPA 7199	4*		75-125			1.2	0.33 J	111* (1)	20
Batch number: 13319039401A	Sample number(s): 7279099-7279104,7279106-7279108,7279114 BKG: 7279108								
15a pH by 9045D						7.86	7.85	0	3
Batch number: 13319039401B	Sample number(s): 7279115-7279116 BKG: 7279116								
15a pH by 9045D						7.63	7.64	0	3
Batch number: 13320121521A	Sample number(s): 7279098 BKG: P280020								
28b pH (9040B and 9040C)						7.3	7.5	3	3
Batch number: 13323162401B	Sample number(s): 7279099-7279104,7279106-7279116 BKG: 7279108								
14a Moisture Content by 160.3						9.2	9.2	1	20
14a Moisture Content by 160.3						9.2	9.2	1	20
14a Moisture Content by 160.3						9.2	9.2	1	20
Batch number: 13328002	Sample number(s): 7279099-7279104,7279106-7279110,7279115-7279116 UNSPK: 7279108								
2378-TCDD	93	97	40-135	5	20				
12378-PeCDD	101	101	40-135	1	20				
123478-HxCDD	105	106	40-135	3	20				
123678-HxCDD	104	103	40-135	0	20				
123789-HxCDD	105	105	40-135	1	20				
1234678-HpCDD	106	107	40-135	3	20				
OCDD	106	103	40-135	1	20				
2378-TCDF	98	100	40-135	3	20				
12378-PeCDF	104	108	40-135	5	20				
23478-PeCDF	109	104	40-135	3	20				
123478-HxCDF	108	106	40-135	0	20				
123678-HxCDF	106	108	40-135	3	20				
123789-HxCDF	103	108	40-135	6	20				
234678-HxCDF	107	109	40-135	3	20				
1234678-HpCDF	107	110	40-135	4	20				
1234789-HpCDF	108	111	40-135	4	20				
OCDF	103	103	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B133252AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7279108	107	110	96	91
7279109	100	95	102	103
7279110	101	100	101	102
7279115	105	104	98	93

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

7279116	103	104	99	94
Blank	105	104	97	93
LCS	100	100	101	107
MS	100	95	102	103
MSD	101	100	101	102
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 13b 1,4-Dioxane by 8260B SIM
Batch number: E133241AA

	Toluene-d8
7279098	97
7279105	97
Blank	97
LCS	98
MS	97
MSD	97
Limits:	80-120

Analysis Name: 13a 1,4-Dioxane by 8260B SIM
Batch number: E133291AA

	Toluene-d8
7279108	45*
7279109	43*
7279110	44*
7279115	44*
7279116	43*
Blank	101
LCS	101
LCSD	102
MS	43*
MSD	44*
Limits:	70-130

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y133301AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7279098	100	102	101	95
7279105	100	102	101	95
Blank	100	102	100	95
LCS	99	105	103	100
LCSD	99	104	103	100
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13322WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7279098	101	95	98

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

Blank	99	97	93
LCS	106	106	103
LCSD	103	94	101
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13323SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7279099	62	82	92
7279100	90	90	94
7279101	93	87	105
7279102	91	87	99
7279103	90	87	98
7279104	92	89	98
7279106	91	88	101
7279107	93	90	101
7279108	101	93	103
7279109	92	86	100
7279110	94	90	102
7279115	89	86	96
7279116	91	88	97
Blank	68	88	94
LCS	84	81	91
MS	92	86	100
MSD	94	90	102
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13323A16A

	Trifluorotoluene-F
7279100	104
7279101	83
7279102	82
7279103	89
7279104	80
7279107	84
7279108	78
7279109	88
7279110	91
7279115	90
7279116	84
Blank	102
LCS	96
MS	88
MSD	91
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13325A94A

	Trifluorotoluene-F

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

7279098	89
7279105	88
Blank	85
LCS	92
LCSD	90
Limits:	63-135

Analysis Name: 19b Formaldehyde 8315A
Batch number: 133200003A

	Butyraldehyde
7279098	88
Blank	80
LCS	81
LCSD	79
Limits:	36-155

Analysis Name: 25a Formaldehyde by EPA 8315A
Batch number: 133220001A

	Butyraldehyde
7279106	122
7279107	124
7279108	124
7279109	121
7279110	128*
7279115	136*
7279116	123
Blank	112
LCS	117
MS	121
MSD	128*
Limits:	64-126

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 133220007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7279098	89	97
Blank	107	112
LCS	79	87
LCSD	82	90
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133220008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7279098	98	91
Blank	86	88
LCS	98	29*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

LCSD	109	79
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133250033A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7279099	103	83
7279100	57	56
7279101	107	93
7279102	109	106
7279103	109	106
7279104	111	111
7279106	117	111
7279107	96	100
7279108	103	106
7279109	100	106
7279110	107	115
7279115	111	114
7279116	113	111
Blank	114	127*
LCS	114	132*
LCSD	115	131*
MS	100	106
MSD	107	115
Limits:	45-120	45-120

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133220028A

	Chlorobenzene	Orthoterphenyl
7279098	106	93
Blank	93	82
LCS	89	82
LCSD	95	89
Limits:	45-126	69-119

Analysis Name: 14b Alcohols by EPA 8015C
Batch number: 133230036A

	Acetone
7279098	99
Blank	97
LCS	96
LCSD	96
Limits:	71-127

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133240037A

	Chlorobenzene	Orthoterphenyl
7279099	88	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

7279100	88	80
7279101	93	92
7279102	91	88
7279103	86	85
7279104	90	91
7279106	88	88
7279107	89	87
7279108	84	84
7279109	88	86
7279110	87	84
7279115	99	97
7279116	94	91
Blank	89	86
LCS	88	89
MS	88	86
MSD	87	84
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13328002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7279099	77	76	82	81	86	84
7279100	75	64	76	68	72	68
7279101	39	39	43	44	47	44
7279102	60	63	71	71	75	72
7279103	46	37	36	38	37	41
7279104	62	51	59	59	59	61
7279106	69	55	66	67	66	77
7279107	40	45	43	44	44	46
7279108	50	46	52	53	53	56
7279109	67	62	73	75	74	82
7279110	63	63	72	74	73	82
7279115	67	45	54	56	59	74
7279116	74	42	42	43	47	67
Blank	60	48	54	55	52	59
MS	67	62	73	75	74	82
MSD	63	63	72	74	73	82
OPR	30	30	33	33	35	36
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7279099	71	63	41	76	85	87
7279100	54	41	20	55	74	68
7279101	47	41	39	40	47	46
7279102	76	62	57	62	73	73
7279103	42	27	25	36	39	38
7279104	63	44	43	50	62	60
7279106	65	59	56	50	69	65
7279107	45	39	38	44	44	44
7279108	55	45	41	48	55	54
7279109	76	67	66	58	76	77
7279110	70	63	65	62	73	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

7279115	59	48	46	41	57	55
7279116	43	36	34	38	45	44
Blank	58	41	35	45	56	56
MS	76	67	66	58	76	77
MSD	70	63	65	62	73	75
OPR	37	31	30	31	34	34
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7279099	85	70	44	75	74
7279100	65	46	22	65	61
7279101	44	42	42	38	41
7279102	71	67	60	61	67
7279103	38	33	33	37	37
7279104	57	50	50	52	49
7279106	68	61	63	61	55
7279107	43	40	39	40	46
7279108	54	48	45	49	49
7279109	74	68	69	63	64
7279110	73	60	67	62	60
7279115	57	53	54	54	44
7279116	49	41	40	54	45
Blank	47	48	44	49	47
MS	74	68	69	63	64
MSD	73	60	67	62	60
OPR	34	33	33	29	31
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13329002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7279098	71	65	80	80	80	76
Blank	68	64	84	83	81	77
OPR	74	70	91	92	90	85
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7279098	70	60	51	60	72	75
Blank	72	63	55	58	74	73
OPR	79	72	64	62	81	83
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7279098	72	61	49	68	67
Blank	72	61	50	66	64
OPR	78	68	60	74	70
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434351
Reported: 12/12/13 at 09:12 AM

Surrogate Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1434351 Sample#7279098-116

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/14/2013
CarrierName: FedEx
AirbillNo: 797164273268

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131114-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-111413	11/14/13 15:30	WQ	HCl	9 - 40 mL Vial	10 day																	X	X	X												
EB-111413	11/14/13 15:30	WQ	HCl	2 - 40 mL Vial	10 day																						X									
EB-111413	11/14/13 15:30	WQ	None	4 - 250 mL Amber	10 day						X				X						X											X				TIC for morpholine only.
EB-111413	11/14/13 15:30	WQ	HCl	2 - 1 L Amber	10 day																				X											
EB-111413	11/14/13 15:30	WQ	None	2 - 1 L Amber	10 day									X																						
EB-111413	11/14/13 15:30	WQ	None	2 - 250 mL Poly	10 day													X		X																
EB-111413	11/14/13 15:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																												
EB-111413	11/14/13 15:30	WQ	None	1 - 250 mL Amber	10 day							X																								

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/14/13	1500									
									111513 915		

acct#13013 Cap#1431351 Sample# 7279098-116

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/14/2013

CarrierName: FedEx

AirbillNo: 7971 6427 3268

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20131114-02

Cooler #: 2

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-508-SA5A-SB-0.0-0.5	11/14/13 09:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-508-SA5A-SB-0.0-0.5	11/14/13 09:35	SO	None	1 - 4 oz glass	10 day														X																	
SL-508-SA5A-SB-4.0-5.0	11/14/13 09:47	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-508-SA5A-SB-9.0-10.0	11/14/13 09:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-508-SA5A-SB-17.0-18.0	11/14/13 10:02	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-508-SA5A-SB-21.0-22.0	11/14/13 10:09	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-508-SA5A-SB-33.0-34.0	11/14/13 09:18	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/14/13	1500									
									Brenely Ben	111513	915

acct#13013 Gp#1434351 Sample#7279098-116

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/14/2013
CarrierName: FedEx
AirbillNo: 797164273268

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131114-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-111413	11/14/13 08:00	WQ	HCl	9 - 40 mL Vial	10 day																		X	X	X											
SL-508-SA5A-SB-4.0-5.0	11/14/13 09:47	SO	None	2 - Encore	10 day																				X											
SL-508-SA5A-SB-9.0-10.0	11/14/13 09:55	SO	None	2 - Encore	10 day																				X											
SL-508-SA5A-SB-17.0-18.0	11/14/13 10:02	SO	None	2 - Encore	10 day																				X											
SL-508-SA5A-SB-21.0-22.0	11/14/13 10:09	SO	None	2 - Encore	10 day																				X											
SL-508-SA5A-SB-33.0-34.0	11/14/13 09:18	SO	None	2 - Encore	10 day																				X											
SL-521-SA5A-SB-9.0-10.0	11/14/13 13:50	SO	None	2 - Encore	10 day																				X											
SL-521-SA5A-SB-11.0-12.0MS	11/14/13 14:20	SO	None	24 - Encore	10 day																		X	X	X											
SL-821-SA5A-SB-11.0-12.0	11/14/13 14:25	SO	None	8 - Encore	10 day																		X	X	X											
SL-521-SA5A-SB-14.0-15.0	11/14/13 14:35	SO	None	8 - Encore	10 day																		X	X	X											

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/14/13	1600									
									111513 915		

acct#13013 Cp#1434351 sample# 7279098-116

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/14/2013
CarrierName: FedEx
AirbillNo: 797164273268

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131114-04
Cooler #: 4
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-521-SA5A-SB-0.0-0.5	11/14/13 13:18	SO	None	2 - SS-Sleeve	10 day	X	X				X	X		X	X											X						X				Analyze TIC for morpholine only.
SL-521-SA5A-SB-0.0-0.5	11/14/13 13:18	SO	None	2 - 4 oz glass	10 day														X		X															
SL-521-SA5A-SB-9.0-10.0	11/14/13 13:50	SO	None	2 - 16 oz glass	10 day	X	X				X	X		X	X				X		X					X						X				Analyze TIC for morpholine only.
SL-521-SA5A-SB-11.0-12.0MS	11/14/13 14:20	SO	None	6 - 16 oz glass	10 day	X	X				X	X		X	X				X		X					X						X				Analyze TIC for morpholine only.
SL-821-SA5A-SB-11.0-12.0	11/14/13 14:25	SO	None	2 - 16 oz glass	10 day	X	X				X	X		X	X				X		X					X						X				Analyze TIC for morpholine only.
SL-521-SA5A-SB-14.0-15.0	11/14/13 14:35	SO	None	2 - 16 oz glass	10 day	X	X				X	X		X	X				X		X					X						X				Analyze TIC for morpholine only.

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/14/13	1612									
									Brenneke Bus	111513	915

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GH1434351

Environmental Sample Administration
Receipt Documentation Log

Client/Project: CDM

Date of Receipt: 11.15.13

Time of Receipt: 915

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	0.7	TB	WI	Y	B	
2	↓	0.5	↓	↓	↓	↓	
3	↓	0.5	↓	↓	↓	↓	
4	↓	0.9	↓	↓	↓	↓	
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brenely Bcuely 2299 **Date/Time:** 11.15.13 1108

Issued by Dept. 6042 Management

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 10, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/19/2013
Group Number: 1434844
SDG: PH131
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-111813 Water	7282325
SL-696-SA5A-SB-0.0-0.5 Soil	7282326
SL-696-SA5A-SB-4.0-5.0 Soil	7282327
SL-709-SA5A-SB-0.0-0.5 Soil	7282328
SL-1009-SA5A-SB-4.0-5.0 Soil	7282329
SL-709-SA5A-SB-4.0-5.0 Soil	7282330
SL-709-SA5A-SB-4.0-5.0MS Soil	7282331
SL-709-SA5A-SB-4.0-5.0MSD Soil	7282332
SL-709-SA5A-SB-4.0-5.0DUP Soil	7282333
SL-709-SA5A-SB-8.0-9.0 Soil	7282334
SL-710-SA5A-SB-0.0-0.5 Soil	7282335
SL-722-SA5A-SB-0.0-0.5 Soil	7282336
SL-735-SA5A-SB-0.0-0.5 Soil	7282337
SL-735-SA5A-SB-2.5-3.5 Soil	7282338
SL-736-SA5A-SB-0.0-0.5 Soil	7282339
SL-736-SA5A-SB-3.0-4.0 Soil	7282340

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-111813 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7282325
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

131TB SDG#: PH131-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/22/2013 00:22	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/22/2013 00:22	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.76	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	0.87	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.73	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.4	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.7	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	23		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	59		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	3.06	J	4.06	0.710	1
06946	Barium	7440-39-3	105		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.509	J	1.01	0.0680	1
07914	Boron	7440-42-8	2.11	J	10.1	0.852	1
06949	Cadmium	7440-43-9	0.166	J	1.01	0.0771	1
01650	Calcium	7440-70-2	13,700		20.3	3.39	1
06951	Chromium	7440-47-3	17.2		3.04	0.162	1
06952	Cobalt	7440-48-4	4.24		1.01	0.100	1
06953	Copper	7440-50-8	12.1		2.03	0.294	1
01654	Iron	7439-89-6	18,400		40.6	3.67	1
06955	Lead	7439-92-1	7.69		3.04	0.507	1
01656	Lithium	7439-93-2	18.6		4.1	0.34	1
01657	Magnesium	7439-95-4	3,800		10.1	1.69	1
06958	Manganese	7439-96-5	274		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.508	J	2.03	0.172	1
06961	Nickel	7440-02-0	10.1		2.03	0.132	1
10145	Phosphorus	7723-14-0	367		10.1	2.93	1
01662	Potassium	7440-09-7	3,440		101	8.46	1
01667	Sodium	7440-23-5	137		101	16.9	1
06969	Tin	7440-31-5	2.86	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,080		1.01	0.172	1
06971	Vanadium	7440-62-2	31.6		1.01	0.132	1
06972	Zinc	7440-66-6	199		4.06	0.203	1
10146	Zirconium	7440-67-7	3.62	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.148	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0457	J	0.203	0.0264	2
06144	Strontium	7440-24-6	53.8		0.406	0.0690	2
06145	Thallium	7440-28-0	0.262		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0366		0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32		0.0100	0.0100	1
	The pH was measured in water at 18.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.00	U	1.00	0.0951	1
11031	12378-PeCDD	40321-76-4	5.00	U	5.00	0.0593	1
11031	123478-HxCDD	39227-28-6	5.00	U	5.00	0.0482	1
11031	123678-HxCDD	57653-85-7	0.184	JQ	5.00	0.0485	1
11031	123789-HxCDD	19408-74-3	0.324	JBQ	5.00	0.0425	1
11031	1234678-HpCDD	35822-46-9	4.12	JB	5.00	0.0706	1
11031	OCDD	3268-87-9	49.8	B	10.0	0.0638	1
11031	2378-TCDF	51207-31-9	1.00	U	1.00	0.103	1
11031	12378-PeCDF	57117-41-6	0.0858	JBQ	5.00	0.0458	1
11031	23478-PeCDF	57117-31-4	0.0561	JBQ	5.00	0.0447	1
11031	123478-HxCDF	70648-26-9	0.115	JQ	5.00	0.0614	1
11031	123678-HxCDF	57117-44-9	5.00	U	5.00	0.0574	1
11031	123789-HxCDF	72918-21-9	0.210	JBQ	5.00	0.0463	1
11031	234678-HxCDF	60851-34-5	0.0615	JB	5.00	0.0512	1
11031	1234678-HpCDF	67562-39-4	0.894	JB	5.00	0.0299	1
11031	1234789-HpCDF	55673-89-7	0.0499	JBQ	5.00	0.0436	1
11031	OCDF	39001-02-0	2.21	JBQ	10.0	0.0765	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0712				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	99	32 - 141
13C12-123678-HxCDD	104	28 - 130
13C12-123789-HxCDD	108	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	102	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 17:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 01:44	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 23:33	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 09:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:15	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:22	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:22	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282326
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 08:56

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69600 SDG#: PH131-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:22	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:22	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.48
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.756	1
06935	Arsenic	7440-38-2	4.75		4.08	0.715	1
06946	Barium	7440-39-3	79.3		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.588	J	1.02	0.0684	1
07914	Boron	7440-42-8	0.975	J	10.2	0.858	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	2,750		20.4	3.41	1
06951	Chromium	7440-47-3	16.8		3.06	0.163	1
06952	Cobalt	7440-48-4	4.86		1.02	0.101	1
06953	Copper	7440-50-8	4.41		2.04	0.296	1
01654	Iron	7439-89-6	22,600		40.8	3.70	1
06955	Lead	7439-92-1	6.45		3.06	0.511	1
01656	Lithium	7439-93-2	29.0		4.1	0.35	1
01657	Magnesium	7439-95-4	5,050		10.2	1.71	1
06958	Manganese	7439-96-5	246		1.02	0.0848	1
06960	Molybdenum	7439-98-7	0.228	J	2.04	0.174	1
06961	Nickel	7440-02-0	8.79		2.04	0.133	1
10145	Phosphorus	7723-14-0	296		10.2	2.95	1
01662	Potassium	7440-09-7	1,480		102	8.52	1
01667	Sodium	7440-23-5	114		102	17.1	1
06969	Tin	7440-31-5	2.86	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,090		1.02	0.174	1
06971	Vanadium	7440-62-2	36.2		1.02	0.133	1
06972	Zinc	7440-66-6	45.8		4.08	0.204	1
10146	Zirconium	7440-67-7	3.02	J	5.11	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.136	J	0.408	0.102	2
06142	Silver	7440-22-4	0.0272	J	0.204	0.0266	2
06144	Strontium	7440-24-6	20.9		0.408	0.0694	2
06145	Thallium	7440-28-0	0.222		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 18.4 C.	n.a.	6.77		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.108	1
11031	12378-PeCDD	40321-76-4	5.17	U	5.17	0.0613	1
11031	123478-HxCDD	39227-28-6	5.17	U	5.17	0.0327	1
11031	123678-HxCDD	57653-85-7	0.0586	JQ	5.17	0.0325	1
11031	123789-HxCDD	19408-74-3	0.0463	JBQ	5.17	0.0321	1
11031	1234678-HpCDD	35822-46-9	0.122	JBQ	5.17	0.0530	1
11031	OCDD	3268-87-9	0.944	JB	10.3	0.0525	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0867	1
11031	12378-PeCDF	57117-41-6	5.17	U	5.17	0.0425	1
11031	23478-PeCDF	57117-31-4	0.0900	JBQ	5.17	0.0424	1
11031	123478-HxCDF	70648-26-9	5.17	U	5.17	0.0492	1
11031	123678-HxCDF	57117-44-9	0.0523	JBQ	5.17	0.0449	1
11031	123789-HxCDF	72918-21-9	0.0621	JBQ	5.17	0.0479	1
11031	234678-HxCDF	60851-34-5	0.0515	JBQ	5.17	0.0439	1
11031	1234678-HpCDF	67562-39-4	0.0626	JBQ	5.17	0.0172	1
11031	1234789-HpCDF	55673-89-7	5.17	U	5.17	0.0286	1
11031	OCDF	39001-02-0	0.105	JBQ	10.3	0.0707	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000313				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	53	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	63	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 17:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 06:11	Laura M Krieger	26.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:38	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:39	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 02:03	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 18:57	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 10:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:19	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-696-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282327
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 09:05

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

69645 SDG#: PH131-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:24	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:24	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:24	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:24	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.69	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg		mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	0.17	U	0.17	0.068	1
10318	o-Terphenyl	84-15-1	0.17	U	0.17	0.068	1
10318	p-Terphenyl	92-94-4	0.17	U	0.17	0.068	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.0	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		40.1	7.22	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.741	1
06935	Arsenic	7440-38-2	3.92	J	4.01	0.701	1
06946	Barium	7440-39-3	80.0		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.608	J	1.00	0.0671	1
07914	Boron	7440-42-8	1.23	J	10.0	0.841	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0761	1
01650	Calcium	7440-70-2	2,690		20.0	3.34	1
06951	Chromium	7440-47-3	18.1		3.00	0.160	1
06952	Cobalt	7440-48-4	5.07		1.00	0.0991	1
06953	Copper	7440-50-8	5.96		2.00	0.290	1
01654	Iron	7439-89-6	21,100		40.1	3.63	1
06955	Lead	7439-92-1	6.81		3.00	0.501	1
01656	Lithium	7439-93-2	22.5		4.0	0.34	1
01657	Magnesium	7439-95-4	4,670		10.0	1.67	1
06958	Manganese	7439-96-5	301		1.00	0.0831	1
06960	Molybdenum	7439-98-7	0.316	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.2		2.00	0.130	1
10145	Phosphorus	7723-14-0	337		10.0	2.89	1
01662	Potassium	7440-09-7	2,630		100	8.35	1
01667	Sodium	7440-23-5	68.3	J	100	16.7	1
06969	Tin	7440-31-5	2.73	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,070		1.00	0.170	1
06971	Vanadium	7440-62-2	34.0		1.00	0.130	1
06972	Zinc	7440-66-6	53.6		4.01	0.200	1
10146	Zirconium	7440-67-7	2.49	J	5.01	0.841	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.170	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0395	J	0.200	0.0260	2
06144	Strontium	7440-24-6	22.1		0.401	0.0681	2
06145	Thallium	7440-28-0	0.297		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.50		0.0100	0.0100	1
	The pH was measured in water at 17.3 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	2.1	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.997	U	0.997	0.0792	1
11031	12378-PeCDD	40321-76-4	4.98	U	4.98	0.0857	1
11031	123478-HxCDD	39227-28-6	4.98	U	4.98	0.0517	1
11031	123678-HxCDD	57653-85-7	0.0747	JQ	4.98	0.0535	1
11031	123789-HxCDD	19408-74-3	0.157	JBQ	4.98	0.0505	1
11031	1234678-HpCDD	35822-46-9	0.457	JBQ	4.98	0.0695	1
11031	OCDD	3268-87-9	7.61	JB	9.97	0.0539	1
11031	2378-TCDF	51207-31-9	0.997	U	0.997	0.104	1
11031	12378-PeCDF	57117-41-6	0.0856	JBQ	4.98	0.0464	1
11031	23478-PeCDF	57117-31-4	0.0703	JBQ	4.98	0.0455	1
11031	123478-HxCDF	70648-26-9	4.98	U	4.98	0.0478	1
11031	123678-HxCDF	57117-44-9	4.98	U	4.98	0.0409	1
11031	123789-HxCDF	72918-21-9	0.0782	JBQ	4.98	0.0561	1
11031	234678-HxCDF	60851-34-5	4.98	U	4.98	0.0421	1
11031	1234678-HpCDF	67562-39-4	0.150	JBQ	4.98	0.0188	1
11031	1234789-HpCDF	55673-89-7	0.0510	JBQ	4.98	0.0292	1
11031	OCDF	39001-02-0	0.302	JBQ	9.97	0.0802	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00225				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 18:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 02:21	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 15:34	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 19:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 11:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:31	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282328
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:10

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70900 SDG#: PH131-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:31	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:31	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:31	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:31	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	11		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.74	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	0.76	J	1.7	0.68	1

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.46
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	0.12	J	0.17	0.068	1
10318	o-Terphenyl	84-15-1	0.17	U	0.17	0.068	1
10318	p-Terphenyl	92-94-4	0.17	U	0.17	0.068	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	13		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	33		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	4.08		4.00	0.700	1
06946	Barium	7440-39-3	86.2		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.566	J	1.00	0.0670	1
07914	Boron	7440-42-8	2.05	J	10.0	0.840	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0760	1
01650	Calcium	7440-70-2	2,640		20.0	3.34	1
06951	Chromium	7440-47-3	19.8		3.00	0.160	1
06952	Cobalt	7440-48-4	4.79		1.00	0.0990	1
06953	Copper	7440-50-8	6.34		2.00	0.290	1
01654	Iron	7439-89-6	20,000		40.0	3.62	1
06955	Lead	7439-92-1	8.02		3.00	0.500	1
01656	Lithium	7439-93-2	22.3		4.0	0.34	1
01657	Magnesium	7439-95-4	4,470		10.0	1.67	1
06958	Manganese	7439-96-5	379		1.00	0.0830	1
06960	Molybdenum	7439-98-7	1.21	J	2.00	0.170	1
06961	Nickel	7440-02-0	11.8		2.00	0.130	1
10145	Phosphorus	7723-14-0	409		10.0	2.89	1
01662	Potassium	7440-09-7	3,240		100	8.34	1
01667	Sodium	7440-23-5	78.9	J	100	16.7	1
06969	Tin	7440-31-5	2.70	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,060		1.00	0.170	1
06971	Vanadium	7440-62-2	33.5		1.00	0.130	1
06972	Zinc	7440-66-6	55.9		4.00	0.200	1
10146	Zirconium	7440-67-7	2.58	J	5.00	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.161	J	0.400	0.100	2
06142	Silver	7440-22-4	0.0930	J	0.200	0.0260	2
06144	Strontium	7440-24-6	22.9		0.400	0.0680	2
06145	Thallium	7440-28-0	0.286		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0166	U	0.0166	0.0099	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 17.1 C.	n.a.	6.68	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.0	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.998	U	0.998	0.0864	1
11031	12378-PeCDD	40321-76-4	0.133	JQ	4.99	0.0587	1
11031	123478-HxCDD	39227-28-6	4.99	U	4.99	0.0569	1
11031	123678-HxCDD	57653-85-7	0.266	JQ	4.99	0.0681	1
11031	123789-HxCDD	19408-74-3	0.189	JB	4.99	0.0635	1
11031	1234678-HpCDD	35822-46-9	6.36	B	4.99	0.0795	1
11031	OCDD	3268-87-9	95.2	B	9.98	0.0477	1
11031	2378-TCDF	51207-31-9	0.998	U	0.998	0.101	1
11031	12378-PeCDF	57117-41-6	0.271	JBQ	4.99	0.0496	1
11031	23478-PeCDF	57117-31-4	0.106	JBQ	4.99	0.0446	1
11031	123478-HxCDF	70648-26-9	0.0855	JQ	4.99	0.0560	1
11031	123678-HxCDF	57117-44-9	0.0779	JBQ	4.99	0.0495	1
11031	123789-HxCDF	72918-21-9	4.99	U	4.99	0.0644	1
11031	234678-HxCDF	60851-34-5	0.100	JBQ	4.99	0.0523	1
11031	1234678-HpCDF	67562-39-4	1.39	JB	4.99	0.0371	1
11031	1234789-HpCDF	55673-89-7	0.132	JBQ	4.99	0.0513	1
11031	OCDF	39001-02-0	3.32	JB	9.98	0.0854	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.126				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	64	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	61	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 18:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 06:49	Laura M Krieger	25.46
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:43	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:43	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 02:39	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 16:41	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 23:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 12:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1009-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282329
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:20

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10094 SDG#: PH131-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:35	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:34	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:34	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:34	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:34	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401A	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.60	J	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.0	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.3	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	17		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.9		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	3.1		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	J	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	2.8		1.7	0.68	1
12969	Pyrene	129-00-0	4.7		1.7	0.68	1

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	0.17	U	0.17	0.069	1
10318	o-Terphenyl	84-15-1	0.17	U	0.17	0.069	1
10318	p-Terphenyl	92-94-4	0.17	U	0.17	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.5	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	16		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	38		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1
06935	Arsenic	7440-38-2	3.81	J	4.05	0.709	1
06946	Barium	7440-39-3	84.6		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.605	J	1.01	0.0679	1
07914	Boron	7440-42-8	2.15	J	10.1	0.851	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0770	1
01650	Calcium	7440-70-2	2,600		20.3	3.38	1
06951	Chromium	7440-47-3	18.3		3.04	0.162	1
06952	Cobalt	7440-48-4	5.00		1.01	0.100	1
06953	Copper	7440-50-8	5.76		2.03	0.294	1
01654	Iron	7439-89-6	20,000		40.5	3.67	1
06955	Lead	7439-92-1	7.91		3.04	0.507	1
01656	Lithium	7439-93-2	22.1		4.1	0.34	1
01657	Magnesium	7439-95-4	4,320		10.1	1.69	1
06958	Manganese	7439-96-5	318		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.816	J	2.03	0.172	1
06961	Nickel	7440-02-0	10.7		2.03	0.132	1
10145	Phosphorus	7723-14-0	366		10.1	2.93	1
01662	Potassium	7440-09-7	2,790		101	8.45	1
01667	Sodium	7440-23-5	91.0	J	101	16.9	1
06969	Tin	7440-31-5	2.78	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,030		1.01	0.172	1
06971	Vanadium	7440-62-2	34.2		1.01	0.132	1
06972	Zinc	7440-66-6	51.4		4.05	0.203	1
10146	Zirconium	7440-67-7	2.74	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.145	J	0.405	0.101	2
06142	Silver	7440-22-4	0.158	J	0.203	0.0263	2
06144	Strontium	7440-24-6	24.2		0.405	0.0689	2
06145	Thallium	7440-28-0	0.274		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D The pH was measured in water at 16.9 C.	n.a.	6.63	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.999	U	0.999	0.115	1
11031	12378-PeCDD	40321-76-4	0.0932	JQ	4.99	0.0769	1
11031	123478-HxCDD	39227-28-6	0.138	JBQ	4.99	0.0658	1
11031	123678-HxCDD	57653-85-7	0.391	J	4.99	0.0656	1
11031	123789-HxCDD	19408-74-3	0.200	JBQ	4.99	0.0719	1
11031	1234678-HpCDD	35822-46-9	6.49	B	4.99	0.0915	1
11031	OCDD	3268-87-9	82.8	B	9.99	0.0485	1
11031	2378-TCDF	51207-31-9	0.999	U	0.999	0.122	1
11031	12378-PeCDF	57117-41-6	0.222	JBQ	4.99	0.0532	1
11031	23478-PeCDF	57117-31-4	0.122	JBQ	4.99	0.0497	1
11031	123478-HxCDF	70648-26-9	0.111	J	4.99	0.0655	1
11031	123678-HxCDF	57117-44-9	0.177	JBQ	4.99	0.0564	1
11031	123789-HxCDF	72918-21-9	4.99	U	4.99	0.0661	1
11031	234678-HxCDF	60851-34-5	0.0796	JB	4.99	0.0596	1
11031	1234678-HpCDF	67562-39-4	1.70	JB	4.99	0.0387	1
11031	1234789-HpCDF	55673-89-7	0.194	JBQ	4.99	0.0501	1
11031	OCDF	39001-02-0	4.00	JBQ	9.99	0.0719	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.165				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 15:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 12:37	Laura M Krieger	27.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:47	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:47	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 02:58	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 17:26	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 22:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 13:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282330
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/01/2013 23:51	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:08	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:08	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:08	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:08	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:27	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	34		1.7	0.68	1
12969	Acenaphthylene	208-96-8	32		1.7	0.34	1
12969	Anthracene	120-12-7	31		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	33		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	33		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	29		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	29		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	31		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	29		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	26		18	6.1	1
12969	Chrysene	218-01-9	34		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	32		1.7	0.68	1
12969	Diethylphthalate	84-66-2	30		18	6.1	1
12969	Dimethylphthalate	131-11-3	33		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	32		18	6.1	1
12969	Fluoranthene	206-44-0	25		1.7	0.68	1
12969	Fluorene	86-73-7	32		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	31		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.68	1
12969	Naphthalene	91-20-3	34		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	25		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	31		18	6.1	1
12969	Phenanthrene	85-01-8	33		1.7	0.68	1
12969	Pyrene	129-00-0	32		1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	9.8		1.1	0.2	25.88
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	180		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	2.5		0.17	0.069	1
10318	o-Terphenyl	84-15-1	2.5		0.17	0.069	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	p-Terphenyl	92-94-4	2.5		0.17	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.6	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	7.3		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	15		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.2	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		40.5	7.31	1
06944	Antimony	7440-36-0	31.5		4.05	0.750	1
06935	Arsenic	7440-38-2	18.7		4.05	0.709	1
06946	Barium	7440-39-3	286		1.01	0.0334	1
06947	Beryllium	7440-41-7	5.81		1.01	0.0679	1
07914	Boron	7440-42-8	192		10.1	0.851	1
06949	Cadmium	7440-43-9	4.73		1.01	0.0770	1
01650	Calcium	7440-70-2	3,050		20.3	3.38	1
06951	Chromium	7440-47-3	39.6		3.04	0.162	1
06952	Cobalt	7440-48-4	52.8		1.01	0.100	1
06953	Copper	7440-50-8	29.5		2.03	0.294	1
01654	Iron	7439-89-6	21,300		40.5	3.67	1
06955	Lead	7439-92-1	23.1		3.04	0.507	1
01656	Lithium	7439-93-2	124		4.1	0.34	1
01657	Magnesium	7439-95-4	4,810		10.1	1.69	1
06958	Manganese	7439-96-5	406		1.01	0.0841	1
06960	Molybdenum	7439-98-7	194		2.03	0.172	1
06961	Nickel	7440-02-0	59.8		2.03	0.132	1
10145	Phosphorus	7723-14-0	461		10.1	2.93	1
01662	Potassium	7440-09-7	4,100		101	8.45	1
01667	Sodium	7440-23-5	1,080		101	16.9	1
06969	Tin	7440-31-5	348		10.1	0.223	1
06970	Titanium	7440-32-6	1,290		1.01	0.172	1
06971	Vanadium	7440-62-2	87.8		1.01	0.132	1
06972	Zinc	7440-66-6	102		4.05	0.203	1
10146	Zirconium	7440-67-7	97.1		5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.31		0.405	0.101	2
06142	Silver	7440-22-4	11.2		0.203	0.0263	2
06144	Strontium	7440-24-6	33.0		0.405	0.0689	2
06145	Thallium	7440-28-0	0.711		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.181		0.0165	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.3		0.993	0.0643	1
11031	12378-PeCDD	40321-76-4	95.5		4.96	0.0469	1
11031	123478-HxCDD	39227-28-6	100	B	4.96	0.0410	1
11031	123678-HxCDD	57653-85-7	99.8		4.96	0.0436	1
11031	123789-HxCDD	19408-74-3	100	B	4.96	0.0439	1
11031	1234678-HpCDD	35822-46-9	99.1	B	4.96	0.0574	1
11031	OCDD	3268-87-9	196	B	9.93	0.0484	1
11031	2378-TCDF	51207-31-9	19.7		0.993	0.0807	1
11031	12378-PeCDF	57117-41-6	99.2	B	4.96	0.0335	1
11031	23478-PeCDF	57117-31-4	101	B	4.96	0.0367	1
11031	123478-HxCDF	70648-26-9	102		4.96	0.0573	1
11031	123678-HxCDF	57117-44-9	101	B	4.96	0.0515	1
11031	123789-HxCDF	72918-21-9	103	B	4.96	0.0607	1
11031	234678-HxCDF	60851-34-5	103	B	4.96	0.0498	1
11031	1234678-HpCDF	67562-39-4	99.6	B	4.96	0.0365	1
11031	1234789-HpCDF	55673-89-7	102	B	4.96	0.0485	1
11031	OCDF	39001-02-0	196	B	9.93	0.0572	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	50	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 16:18	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 13:15	Laura M Krieger	25.88
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:46	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:46	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 03:16	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 15:56	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 22:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 19:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282331
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:03	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:15	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:15	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:15	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:15	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	37		1.7	0.68	1
12969	Acenaphthylene	208-96-8	33		1.7	0.34	1
12969	Anthracene	120-12-7	32		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	41		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	30		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	26		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	45		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	32		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	29		18	6.1	1
12969	Chrysene	218-01-9	36		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	31		1.7	0.68	1
12969	Diethylphthalate	84-66-2	33		18	6.1	1
12969	Dimethylphthalate	131-11-3	34		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	33		18	6.1	1
12969	Fluoranthene	206-44-0	25		1.7	0.68	1
12969	Fluorene	86-73-7	34		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	29		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	36		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.68	1
12969	Naphthalene	91-20-3	34		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	28		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	33		18	6.1	1
12969	Phenanthrene	85-01-8	33		1.7	0.68	1
12969	Pyrene	129-00-0	35		1.7	0.68	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	11		1.1	0.2	27.65
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	180		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	3.1		0.17	0.069	1
10318	o-Terphenyl	84-15-1	2.6		0.17	0.069	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	p-Terphenyl	92-94-4	2.6		0.17	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.5	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	8.2		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	17		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	23		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.1	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,400		40.5	7.31	1
06944	Antimony	7440-36-0	32.7		4.05	0.750	1
06935	Arsenic	7440-38-2	19.1		4.05	0.709	1
06946	Barium	7440-39-3	287		1.01	0.0334	1
06947	Beryllium	7440-41-7	5.92		1.01	0.0679	1
07914	Boron	7440-42-8	198		10.1	0.851	1
06949	Cadmium	7440-43-9	4.74		1.01	0.0770	1
01650	Calcium	7440-70-2	3,220		20.3	3.38	1
06951	Chromium	7440-47-3	40.7		3.04	0.162	1
06952	Cobalt	7440-48-4	53.2		1.01	0.100	1
06953	Copper	7440-50-8	30.2		2.03	0.294	1
01654	Iron	7439-89-6	21,400		40.5	3.67	1
06955	Lead	7439-92-1	22.3		3.04	0.507	1
01656	Lithium	7439-93-2	127		4.1	0.34	1
01657	Magnesium	7439-95-4	4,980		10.1	1.69	1
06958	Manganese	7439-96-5	379		1.01	0.0841	1
06960	Molybdenum	7439-98-7	197		2.03	0.172	1
06961	Nickel	7440-02-0	60.6		2.03	0.132	1
10145	Phosphorus	7723-14-0	436		10.1	2.93	1
01662	Potassium	7440-09-7	4,070		101	8.45	1
01667	Sodium	7440-23-5	1,110		101	16.9	1
06969	Tin	7440-31-5	351		10.1	0.223	1
06970	Titanium	7440-32-6	1,340		1.01	0.172	1
06971	Vanadium	7440-62-2	89.4		1.01	0.132	1
06972	Zinc	7440-66-6	102		4.05	0.203	1
10146	Zirconium	7440-67-7	100		5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.34		0.405	0.101	2
06142	Silver	7440-22-4	11.7		0.203	0.0263	2
06144	Strontium	7440-24-6	34.6		0.405	0.0689	2
06145	Thallium	7440-28-0	0.759		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.192		0.0169	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.3	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.5		0.981	0.0492	1
11031	12378-PeCDD	40321-76-4	93.9		4.91	0.0403	1
11031	123478-HxCDD	39227-28-6	98.5	B	4.91	0.0398	1
11031	123678-HxCDD	57653-85-7	101		4.91	0.0416	1
11031	123789-HxCDD	19408-74-3	97.0	B	4.91	0.0387	1
11031	1234678-HpCDD	35822-46-9	97.8	B	4.91	0.0433	1
11031	OCDD	3268-87-9	214	B	9.81	0.0411	1
11031	2378-TCDF	51207-31-9	19.1		0.981	0.0511	1
11031	12378-PeCDF	57117-41-6	100	B	4.91	0.0315	1
11031	23478-PeCDF	57117-31-4	98.9	B	4.91	0.0307	1
11031	123478-HxCDF	70648-26-9	102		4.91	0.0416	1
11031	123678-HxCDF	57117-44-9	101	B	4.91	0.0391	1
11031	123789-HxCDF	72918-21-9	101	B	4.91	0.0455	1
11031	234678-HxCDF	60851-34-5	101	B	4.91	0.0392	1
11031	1234678-HpCDF	67562-39-4	99.0	B	4.91	0.0319	1
11031	1234789-HpCDF	55673-89-7	102	B	4.91	0.0482	1
11031	OCDF	39001-02-0	195	B	9.81	0.0549	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 16:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 13:53	Laura M Krieger	27.65
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:42	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:42	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 03:35	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 16:19	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 22:51	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 20:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282332
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:07	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:17	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:17	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:17	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:17	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282333
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1
06935	Arsenic	7440-38-2	3.77	J	4.05	0.709	1
06946	Barium	7440-39-3	85.4		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.608	J	1.01	0.0679	1
07914	Boron	7440-42-8	1.96	J	10.1	0.851	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0770	1
01650	Calcium	7440-70-2	2,640		20.3	3.38	1
06951	Chromium	7440-47-3	18.9		3.04	0.162	1
06952	Cobalt	7440-48-4	4.82		1.01	0.100	1
06953	Copper	7440-50-8	5.49		2.03	0.294	1
01654	Iron	7439-89-6	20,300		40.5	3.67	1
06955	Lead	7439-92-1	7.85		3.04	0.507	1
01656	Lithium	7439-93-2	22.5		4.1	0.34	1
01657	Magnesium	7439-95-4	4,400		10.1	1.69	1
06958	Manganese	7439-96-5	306		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.814	J	2.03	0.172	1
06961	Nickel	7440-02-0	10.9		2.03	0.132	1
10145	Phosphorus	7723-14-0	336		10.1	2.93	1
01662	Potassium	7440-09-7	2,820		101	8.45	1
01667	Sodium	7440-23-5	96.0	J	101	16.9	1
06969	Tin	7440-31-5	2.81	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,090		1.01	0.172	1
06971	Vanadium	7440-62-2	34.8		1.01	0.132	1
06972	Zinc	7440-66-6	51.3		4.05	0.203	1
10146	Zirconium	7440-67-7	3.00	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.134	J	0.405	0.101	2
06142	Silver	7440-22-4	0.127	J	0.203	0.0263	2
06144	Strontium	7440-24-6	22.0		0.405	0.0689	2
06145	Thallium	7440-28-0	0.249		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0162	U	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.67		0.0100	0.0100	1
	The pH was measured in water at 17.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-4.0-5.0DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282333
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:15

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70945 SDG#: PH131-06DUP

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/01/2013 23:59	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:13	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:13	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:13	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:13	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.71	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	0.74	J	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25.35
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	0.093	J	0.18	0.069	1
10318	o-Terphenyl	84-15-1	0.18	U	0.18	0.069	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	p-Terphenyl	92-94-4	0.18	U	0.18	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		41.4	7.46	1
06944	Antimony	7440-36-0	4.14	U	4.14	0.766	1
06935	Arsenic	7440-38-2	2.85	J	4.14	0.725	1
06946	Barium	7440-39-3	63.4		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.557	J	1.04	0.0694	1
07914	Boron	7440-42-8	1.22	J	10.4	0.870	1
06949	Cadmium	7440-43-9	1.04	U	1.04	0.0787	1
01650	Calcium	7440-70-2	1,930		20.7	3.46	1
06951	Chromium	7440-47-3	20.7		3.11	0.166	1
06952	Cobalt	7440-48-4	3.26		1.04	0.102	1
06953	Copper	7440-50-8	3.66		2.07	0.300	1
01654	Iron	7439-89-6	18,900		41.4	3.75	1
06955	Lead	7439-92-1	5.90		3.11	0.518	1
01656	Lithium	7439-93-2	22.9		4.1	0.35	1
01657	Magnesium	7439-95-4	3,880		10.4	1.73	1
06958	Manganese	7439-96-5	196		1.04	0.0859	1
06960	Molybdenum	7439-98-7	1.65	J	2.07	0.176	1
06961	Nickel	7440-02-0	8.10		2.07	0.135	1
10145	Phosphorus	7723-14-0	165		10.4	2.99	1
01662	Potassium	7440-09-7	1,880		104	8.63	1
01667	Sodium	7440-23-5	138		104	17.3	1
06969	Tin	7440-31-5	2.86	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,150		1.04	0.176	1
06971	Vanadium	7440-62-2	32.4		1.04	0.135	1
06972	Zinc	7440-66-6	38.6		4.14	0.207	1
10146	Zirconium	7440-67-7	2.90	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.414	U	0.414	0.104	2
06142	Silver	7440-22-4	0.0445	J	0.207	0.0269	2
06144	Strontium	7440-24-6	19.7		0.414	0.0704	2
06145	Thallium	7440-28-0	0.248		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	7.16	0.0100	0.0100	1
	The pH was measured in water at 16.5 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.4	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0756	JQ	1.00	0.0451	1
11031	12378-PeCDD	40321-76-4	0.217	J	5.01	0.0337	1
11031	123478-HxCDD	39227-28-6	0.146	JBQ	5.01	0.0311	1
11031	123678-HxCDD	57653-85-7	0.191	J	5.01	0.0316	1
11031	123789-HxCDD	19408-74-3	0.200	JBQ	5.01	0.0316	1
11031	1234678-HpCDD	35822-46-9	1.18	JB	5.01	0.0324	1
11031	OCDD	3268-87-9	13.0	B	10.0	0.0286	1
11031	2378-TCDF	51207-31-9	0.0551	JQ	1.00	0.0488	1
11031	12378-PeCDF	57117-41-6	0.225	JBQ	5.01	0.0218	1
11031	23478-PeCDF	57117-31-4	0.238	JBQ	5.01	0.0219	1
11031	123478-HxCDF	70648-26-9	0.171	J	5.01	0.0265	1
11031	123678-HxCDF	57117-44-9	0.220	JB	5.01	0.0267	1
11031	123789-HxCDF	72918-21-9	0.258	JB	5.01	0.0327	1
11031	234678-HxCDF	60851-34-5	0.188	JBQ	5.01	0.0287	1
11031	1234678-HpCDF	67562-39-4	0.329	JB	5.01	0.0152	1
11031	1234789-HpCDF	55673-89-7	0.161	JB	5.01	0.0208	1
11031	OCDF	39001-02-0	0.642	JB	10.0	0.0385	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.322				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	64	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	60	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 19:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 07:27	Laura M Krieger	25.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:40	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:41	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 03:53	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133290025A	11/27/2013 17:03	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 19:39	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
10303	Terphenyls soil prep	SW-846 3550B	1	133290025A	11/26/2013 12:00	Kelli M Barto	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 21:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-709-SA5A-SB-8.0-9.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282334
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 10:25

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70989 SDG#: PH131-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:39	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:36	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:36	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:36	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:36	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	0.78	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		40.9	7.36	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.756	1
06935	Arsenic	7440-38-2	3.17	J	4.09	0.715	1
06946	Barium	7440-39-3	88.7		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.579	J	1.02	0.0684	1
07914	Boron	7440-42-8	1.52	J	10.2	0.858	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	2,070		20.4	3.41	1
06951	Chromium	7440-47-3	17.5		3.06	0.163	1
06952	Cobalt	7440-48-4	4.95		1.02	0.101	1
06953	Copper	7440-50-8	7.16		2.04	0.296	1
01654	Iron	7439-89-6	19,300		40.9	3.70	1
06955	Lead	7439-92-1	6.00		3.06	0.511	1
01656	Lithium	7439-93-2	20.3		4.1	0.35	1
01657	Magnesium	7439-95-4	4,010		10.2	1.71	1
06958	Manganese	7439-96-5	305		1.02	0.0848	1
06960	Molybdenum	7439-98-7	0.481	J	2.04	0.174	1
06961	Nickel	7440-02-0	10.9		2.04	0.133	1
10145	Phosphorus	7723-14-0	371		10.2	2.95	1
01662	Potassium	7440-09-7	3,360		102	8.52	1
01667	Sodium	7440-23-5	67.0	J	102	17.1	1
06969	Tin	7440-31-5	2.63	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,030		1.02	0.174	1
06971	Vanadium	7440-62-2	32.6		1.02	0.133	1
06972	Zinc	7440-66-6	51.2		4.09	0.204	1
10146	Zirconium	7440-67-7	2.27	J	5.11	0.858	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.206	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0505	J	0.204	0.0266	2
06144	Strontium	7440-24-6	20.6		0.409	0.0695	2
06145	Thallium	7440-28-0	0.268		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0160	U	0.0160	0.0096	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.69		0.0100	0.0100	1
	The pH was measured in water at 17.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0925	JQ	0.993	0.0515	1
11031	12378-PeCDD	40321-76-4	0.235	J	4.96	0.0378	1
11031	123478-HxCDD	39227-28-6	0.0801	JBQ	4.96	0.0256	1
11031	123678-HxCDD	57653-85-7	0.301	JQ	4.96	0.0253	1
11031	123789-HxCDD	19408-74-3	0.572	JB	4.96	0.0257	1
11031	1234678-HpCDD	35822-46-9	0.339	JBQ	4.96	0.0315	1
11031	OCDD	3268-87-9	4.27	JB	9.93	0.0275	1
11031	2378-TCDF	51207-31-9	0.0689	JQ	0.993	0.0488	1
11031	12378-PeCDF	57117-41-6	0.315	JBQ	4.96	0.0254	1
11031	23478-PeCDF	57117-31-4	0.181	JB	4.96	0.0251	1
11031	123478-HxCDF	70648-26-9	0.119	JQ	4.96	0.0255	1
11031	123678-HxCDF	57117-44-9	0.143	JB	4.96	0.0232	1
11031	123789-HxCDF	72918-21-9	0.416	JBQ	4.96	0.0259	1
11031	234678-HxCDF	60851-34-5	0.0981	JB	4.96	0.0238	1
11031	1234678-HpCDF	67562-39-4	0.112	JBQ	4.96	0.0113	1
11031	1234789-HpCDF	55673-89-7	0.0560	JBQ	4.96	0.0182	1
11031	OCDF	39001-02-0	0.238	JB	9.93	0.0422	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.372				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	56	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 19:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 04:12	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 20:00	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 22:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:43	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:38	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:38	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-710-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282335
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 12:50

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71000 SDG#: PH131-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:38	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:38	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	0.73	J	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		41.3	7.44	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.764	1
06935	Arsenic	7440-38-2	3.36	J	4.13	0.722	1
06946	Barium	7440-39-3	89.9		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.573	J	1.03	0.0691	1
07914	Boron	7440-42-8	10.3	U	10.3	0.867	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0784	1
01650	Calcium	7440-70-2	2,280		20.6	3.45	1
06951	Chromium	7440-47-3	21.1		3.10	0.165	1
06952	Cobalt	7440-48-4	5.46		1.03	0.102	1
06953	Copper	7440-50-8	5.71		2.06	0.299	1
01654	Iron	7439-89-6	20,500		41.3	3.74	1
06955	Lead	7439-92-1	6.34		3.10	0.516	1
01656	Lithium	7439-93-2	22.0		4.1	0.35	1
01657	Magnesium	7439-95-4	4,500		10.3	1.72	1
06958	Manganese	7439-96-5	298		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.423	J	2.06	0.175	1
06961	Nickel	7440-02-0	10.9		2.06	0.134	1
10145	Phosphorus	7723-14-0	407		10.3	2.98	1
01662	Potassium	7440-09-7	3,670		103	8.61	1
01667	Sodium	7440-23-5	72.2	J	103	17.2	1
06969	Tin	7440-31-5	2.73	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,150		1.03	0.175	1
06971	Vanadium	7440-62-2	35.2		1.03	0.134	1
06972	Zinc	7440-66-6	51.7		4.13	0.206	1
10146	Zirconium	7440-67-7	2.37	J	5.16	0.867	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.189	J	0.413	0.103	2
06142	Silver	7440-22-4	0.206	U	0.206	0.0268	2
06144	Strontium	7440-24-6	16.1		0.413	0.0702	2
06145	Thallium	7440-28-0	0.299		0.206	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.0100	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.64		0.0100	0.0100	1
	The pH was measured in water at 13.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.999	U	0.999	0.0490	1
11031	12378-PeCDD	40321-76-4	0.109	JQ	5.00	0.0399	1
11031	123478-HxCDD	39227-28-6	0.0393	JBQ	5.00	0.0290	1
11031	123678-HxCDD	57653-85-7	0.428	JQ	5.00	0.0302	1
11031	123789-HxCDD	19408-74-3	0.665	JB	5.00	0.0290	1
11031	1234678-HpCDD	35822-46-9	0.342	JB	5.00	0.0266	1
11031	OCDD	3268-87-9	2.76	JB	9.99	0.0257	1
11031	2378-TCDF	51207-31-9	0.0667	JQ	0.999	0.0461	1
11031	12378-PeCDF	57117-41-6	0.209	JBQ	5.00	0.0235	1
11031	23478-PeCDF	57117-31-4	0.152	JB	5.00	0.0261	1
11031	123478-HxCDF	70648-26-9	0.0594	JQ	5.00	0.0284	1
11031	123678-HxCDF	57117-44-9	0.0903	JBQ	5.00	0.0255	1
11031	123789-HxCDF	72918-21-9	0.278	JBQ	5.00	0.0276	1
11031	234678-HxCDF	60851-34-5	0.0816	JBQ	5.00	0.0263	1
11031	1234678-HpCDF	67562-39-4	0.0953	JBQ	5.00	0.0137	1
11031	1234789-HpCDF	55673-89-7	0.0865	JBQ	5.00	0.0186	1
11031	OCDF	39001-02-0	0.241	JBQ	9.99	0.0402	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.116				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	55	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	57	24 - 185
13C12-23478-PeCDF	49	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	52	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 20:27	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 04:30	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 20:21	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/04/2013 23:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:47	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:40	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:40	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-722-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282336
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:22

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72200 SDG#: PH131-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:40	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:40	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	3.9		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.71	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.1		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	18	6.1	1
12969	Fluoranthene	206-44-0	1.0	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.76	J	1.7	0.68	1
12969	Pyrene	129-00-0	1.5	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1
06935	Arsenic	7440-38-2	3.97	J	4.05	0.709	1
06946	Barium	7440-39-3	97.9		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.737	J	1.01	0.0679	1
07914	Boron	7440-42-8	2.43	J	10.1	0.851	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0770	1
01650	Calcium	7440-70-2	4,110		20.3	3.38	1
06951	Chromium	7440-47-3	25.0		3.04	0.162	1
06952	Cobalt	7440-48-4	6.69		1.01	0.100	1
06953	Copper	7440-50-8	9.42		2.03	0.294	1
01654	Iron	7439-89-6	26,100		40.5	3.67	1
06955	Lead	7439-92-1	9.27		3.04	0.507	1
01656	Lithium	7439-93-2	22.7		4.1	0.34	1
01657	Magnesium	7439-95-4	6,220		10.1	1.69	1
06958	Manganese	7439-96-5	315		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.575	J	2.03	0.172	1
06961	Nickel	7440-02-0	14.1		2.03	0.132	1
10145	Phosphorus	7723-14-0	403		10.1	2.93	1
01662	Potassium	7440-09-7	3,220		101	8.45	1
01667	Sodium	7440-23-5	83.1	J	101	16.9	1
06969	Tin	7440-31-5	2.83	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,260		1.01	0.172	1
06971	Vanadium	7440-62-2	52.3		1.01	0.132	1
06972	Zinc	7440-66-6	54.5		4.05	0.203	1
10146	Zirconium	7440-67-7	4.02	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.191	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0312	J	0.203	0.0263	2
06144	Strontium	7440-24-6	21.4		0.405	0.0689	2
06145	Thallium	7440-28-0	0.245		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0163	U	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.24		0.0100	0.0100	1
	The pH was measured in water at 17.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.983	U	0.983	0.0423	1
11031	12378-PeCDD	40321-76-4	0.134	J	4.92	0.0300	1
11031	123478-HxCDD	39227-28-6	0.111	JBQ	4.92	0.0355	1
11031	123678-HxCDD	57653-85-7	0.183	JQ	4.92	0.0374	1
11031	123789-HxCDD	19408-74-3	0.243	JB	4.92	0.0321	1
11031	1234678-HpCDD	35822-46-9	2.80	JB	4.92	0.0304	1
11031	OCDD	3268-87-9	33.9	B	9.83	0.0308	1
11031	2378-TCDF	51207-31-9	0.0488	JQ	0.983	0.0479	1
11031	12378-PeCDF	57117-41-6	0.134	JBQ	4.92	0.0246	1
11031	23478-PeCDF	57117-31-4	0.118	JB	4.92	0.0216	1
11031	123478-HxCDF	70648-26-9	0.0959	J	4.92	0.0284	1
11031	123678-HxCDF	57117-44-9	0.0877	JBQ	4.92	0.0258	1
11031	123789-HxCDF	72918-21-9	0.103	JBQ	4.92	0.0277	1
11031	234678-HxCDF	60851-34-5	0.123	JBQ	4.92	0.0281	1
11031	1234678-HpCDF	67562-39-4	0.585	JB	4.92	0.0155	1
11031	1234789-HpCDF	55673-89-7	0.0678	JBQ	4.92	0.0233	1
11031	OCDF	39001-02-0	1.34	JB	9.83	0.0377	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.248				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 20:58	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 04:49	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 20:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/05/2013 00:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:51	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:43	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:43	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282337
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 13:57

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73500 SDG#: PH131-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:43	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:43	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401A	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		41.1	7.41	1
06944	Antimony	7440-36-0	4.11	U	4.11	0.760	1
06935	Arsenic	7440-38-2	5.19		4.11	0.719	1
06946	Barium	7440-39-3	67.8		1.03	0.0339	1
06947	Beryllium	7440-41-7	0.509	J	1.03	0.0688	1
07914	Boron	7440-42-8	10.3	U	10.3	0.863	1
06949	Cadmium	7440-43-9	1.03	U	1.03	0.0781	1
01650	Calcium	7440-70-2	3,040		20.5	3.43	1
06951	Chromium	7440-47-3	25.5		3.08	0.164	1
06952	Cobalt	7440-48-4	3.88		1.03	0.102	1
06953	Copper	7440-50-8	5.21		2.05	0.298	1
01654	Iron	7439-89-6	25,500		82.2	7.44	2
06955	Lead	7439-92-1	8.37		3.08	0.514	1
01656	Lithium	7439-93-2	21.9		4.1	0.35	1
01657	Magnesium	7439-95-4	5,970		10.3	1.72	1
06958	Manganese	7439-96-5	160		1.03	0.0853	1
06960	Molybdenum	7439-98-7	2.05	U	2.05	0.175	1
06961	Nickel	7440-02-0	8.88		2.05	0.134	1
10145	Phosphorus	7723-14-0	293		10.3	2.97	1
01662	Potassium	7440-09-7	1,530		103	8.57	1
01667	Sodium	7440-23-5	378		103	17.2	1
06969	Tin	7440-31-5	3.21	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,300		1.03	0.175	1
06971	Vanadium	7440-62-2	47.5		1.03	0.134	1
06972	Zinc	7440-66-6	48.2		4.11	0.205	1
10146	Zirconium	7440-67-7	3.35	J	5.14	0.863	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.532		0.411	0.103	2
06142	Silver	7440-22-4	0.205	U	0.205	0.0267	2
06144	Strontium	7440-24-6	21.4		0.411	0.0699	2
06145	Thallium	7440-28-0	0.251		0.205	0.0308	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0216		0.0172	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.08		0.0100	0.0100	1
	The pH was measured in water at 17.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0442	1
11031	12378-PeCDD	40321-76-4	5.22	U	5.22	0.0254	1
11031	123478-HxCDD	39227-28-6	0.0453	JB	5.22	0.0194	1
11031	123678-HxCDD	57653-85-7	0.165	JQ	5.22	0.0207	1
11031	123789-HxCDD	19408-74-3	0.245	JB	5.22	0.0188	1
11031	1234678-HpCDD	35822-46-9	0.102	JBQ	5.22	0.0194	1
11031	OCDD	3268-87-9	0.388	JB	10.4	0.0238	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0418	1
11031	12378-PeCDF	57117-41-6	0.0561	JBQ	5.22	0.0174	1
11031	23478-PeCDF	57117-31-4	0.0229	JBQ	5.22	0.0177	1
11031	123478-HxCDF	70648-26-9	0.0325	J	5.22	0.0172	1
11031	123678-HxCDF	57117-44-9	0.0302	JBQ	5.22	0.0151	1
11031	123789-HxCDF	72918-21-9	0.0861	JB	5.22	0.0165	1
11031	234678-HxCDF	60851-34-5	0.0336	JBQ	5.22	0.0148	1
11031	1234678-HpCDF	67562-39-4	0.0474	JBQ	5.22	0.00910	1
11031	1234789-HpCDF	55673-89-7	0.0400	JBQ	5.22	0.0134	1
11031	OCDF	39001-02-0	0.129	JB	10.4	0.0312	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0411				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 21:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16A	11/27/2013 08:05	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:44	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:45	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 05:07	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 21:04	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/05/2013 00:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 06:48	Joanne M Gates	2
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:55	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-735-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282338
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:00

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73525 SDG#: PH131-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:45	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:45	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:45	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:45	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401B	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.71	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.71	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.71	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.71	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.71	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.71	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.36	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.71	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.71	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.71	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.71	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.71	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.71	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.71	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.71	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.71	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.71	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,300		41.9	7.55	1
06944	Antimony	7440-36-0	4.19	U	4.19	0.775	1
06935	Arsenic	7440-38-2	4.35		4.19	0.733	1
06946	Barium	7440-39-3	106		1.05	0.0346	1
06947	Beryllium	7440-41-7	0.721	J	1.05	0.0702	1
07914	Boron	7440-42-8	1.87	J	10.5	0.880	1
06949	Cadmium	7440-43-9	1.05	U	1.05	0.0796	1
01650	Calcium	7440-70-2	2,220		21.0	3.50	1
06951	Chromium	7440-47-3	22.9		3.14	0.168	1
06952	Cobalt	7440-48-4	5.84		1.05	0.104	1
06953	Copper	7440-50-8	9.41		2.10	0.304	1
01654	Iron	7439-89-6	23,400		41.9	3.79	1
06955	Lead	7439-92-1	8.29		3.14	0.524	1
01656	Lithium	7439-93-2	23.4		4.2	0.36	1
01657	Magnesium	7439-95-4	4,690		10.5	1.75	1
06958	Manganese	7439-96-5	316		1.05	0.0870	1
06960	Molybdenum	7439-98-7	0.442	J	2.10	0.178	1
06961	Nickel	7440-02-0	14.6		2.10	0.136	1
10145	Phosphorus	7723-14-0	434		10.5	3.03	1
01662	Potassium	7440-09-7	4,230		105	8.74	1
01667	Sodium	7440-23-5	73.1	J	105	17.5	1
06969	Tin	7440-31-5	2.81	J	10.5	0.230	1
06970	Titanium	7440-32-6	1,180		1.05	0.178	1
06971	Vanadium	7440-62-2	41.6		1.05	0.136	1
06972	Zinc	7440-66-6	56.3		4.19	0.210	1
10146	Zirconium	7440-67-7	3.29	J	5.24	0.880	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.204	J	0.419	0.105	2
06142	Silver	7440-22-4	0.0423	J	0.210	0.0272	2
06144	Strontium	7440-24-6	19.9		0.419	0.0712	2
06145	Thallium	7440-28-0	0.271		0.210	0.0314	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.52		0.0100	0.0100	1
	The pH was measured in water at 16.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0541	1
11031	12378-PeCDD	40321-76-4	5.24	U	5.24	0.0399	1
11031	123478-HxCDD	39227-28-6	0.0530	JBQ	5.24	0.0365	1
11031	123678-HxCDD	57653-85-7	0.202	J	5.24	0.0380	1
11031	123789-HxCDD	19408-74-3	0.243	JBQ	5.24	0.0364	1
11031	1234678-HpCDD	35822-46-9	2.94	JB	5.24	0.0470	1
11031	OCDD	3268-87-9	73.9	B	10.5	0.0352	1
11031	2378-TCDF	51207-31-9	0.0558	JQ	1.05	0.0493	1
11031	12378-PeCDF	57117-41-6	0.0697	JB	5.24	0.0274	1
11031	23478-PeCDF	57117-31-4	0.0549	JB	5.24	0.0279	1
11031	123478-HxCDF	70648-26-9	0.0982	JQ	5.24	0.0257	1
11031	123678-HxCDF	57117-44-9	0.0560	JBQ	5.24	0.0229	1
11031	123789-HxCDF	72918-21-9	0.136	JBQ	5.24	0.0252	1
11031	234678-HxCDF	60851-34-5	5.24	U	5.24	0.0238	1
11031	1234678-HpCDF	67562-39-4	0.315	JB	5.24	0.0156	1
11031	1234789-HpCDF	55673-89-7	0.0594	JBQ	5.24	0.0216	1
11031	OCDF	39001-02-0	1.05	JBQ	10.5	0.0437	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0937				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	58	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	49	24 - 169
13C12-12378-PeCDF	56	24 - 185
13C12-23478-PeCDF	53	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	54	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 22:01	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 05:26	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 21:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/05/2013 01:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 00:59	Tara L Snyder	1
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:47	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:47	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282339
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:30

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73600 SDG#: PH131-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:47	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:47	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401B	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.2	U	1.2	0.2	27.17
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,200		43.0	7.76	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.796	1
06935	Arsenic	7440-38-2	7.17		4.30	0.753	1
06946	Barium	7440-39-3	179		1.08	0.0355	1
06947	Beryllium	7440-41-7	1.61		1.08	0.0721	1
07914	Boron	7440-42-8	1.11	J	10.8	0.904	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0818	1
01650	Calcium	7440-70-2	5,080		21.5	3.59	1
06951	Chromium	7440-47-3	39.1		3.23	0.172	1
06952	Cobalt	7440-48-4	10.9		1.08	0.107	1
06953	Copper	7440-50-8	18.6		2.15	0.312	1
01654	Iron	7439-89-6	34,900		215	19.5	5
06955	Lead	7439-92-1	16.9		3.23	0.538	1
01656	Lithium	7439-93-2	49.0		4.3	0.37	1
01657	Magnesium	7439-95-4	10,700		10.8	1.80	1
06958	Manganese	7439-96-5	497		1.08	0.0893	1
06960	Molybdenum	7439-98-7	0.546	J	2.15	0.183	1
06961	Nickel	7440-02-0	22.1		2.15	0.140	1
10145	Phosphorus	7723-14-0	868		10.8	3.11	1
01662	Potassium	7440-09-7	4,690		108	8.98	1
01667	Sodium	7440-23-5	165		108	18.0	1
06969	Tin	7440-31-5	4.72	J	10.8	0.237	1
06970	Titanium	7440-32-6	1,610		5.38	0.915	5
06971	Vanadium	7440-62-2	75.1		1.08	0.140	1
06972	Zinc	7440-66-6	98.3		4.30	0.215	1
10146	Zirconium	7440-67-7	5.83		5.38	0.904	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.390	J	0.430	0.108	2
06142	Silver	7440-22-4	0.215	U	0.215	0.0280	2
06144	Strontium	7440-24-6	33.7		0.430	0.0732	2
06145	Thallium	7440-28-0	0.392		0.215	0.0323	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0179	U	0.0179	0.0108	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78		0.0100	0.0100	1
	The pH was measured in water at 17.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.9		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0791 JQ	1.08	0.0457	1
11031	12378-PeCDD	40321-76-4	0.0749 JQ	5.39	0.0333	1
11031	123478-HxCDD	39227-28-6	5.39 U	5.39	0.0303	1
11031	123678-HxCDD	57653-85-7	0.0699 JQ	5.39	0.0304	1
11031	123789-HxCDD	19408-74-3	0.0954 JBQ	5.39	0.0316	1
11031	1234678-HpCDD	35822-46-9	0.132 JBQ	5.39	0.0245	1
11031	OCDD	3268-87-9	0.299 JBQ	10.8	0.0232	1
11031	2378-TCDF	51207-31-9	1.08 U	1.08	0.0423	1
11031	12378-PeCDF	57117-41-6	0.0301 JBQ	5.39	0.0186	1
11031	23478-PeCDF	57117-31-4	0.0291 JBQ	5.39	0.0176	1
11031	123478-HxCDF	70648-26-9	0.0463 JQ	5.39	0.0178	1
11031	123678-HxCDF	57117-44-9	0.0539 JBQ	5.39	0.0158	1
11031	123789-HxCDF	72918-21-9	0.0693 JBQ	5.39	0.0165	1
11031	234678-HxCDF	60851-34-5	0.0260 JB	5.39	0.0177	1
11031	1234678-HpCDF	67562-39-4	0.0325 JBQ	5.39	0.00911	1
11031	1234789-HpCDF	55673-89-7	0.0290 JBQ	5.39	0.0135	1
11031	OCDF	39001-02-0	0.129 JBQ	10.8	0.0371	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00263			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	60	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13327SLE026	12/04/2013 22:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13327SLE026	11/25/2013 09:30	David S Schrum	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16B	11/27/2013 10:06	Marie D Beamenderfer	27.17
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332333171	11/19/2013 13:39	Larry E Bevins	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332333171	11/19/2013 13:40	Larry E Bevins	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300018A	12/01/2013 05:44	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300018A	11/27/2013 03:00	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133290028A	11/26/2013 21:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133290028A	11/26/2013 09:45	Anna E Stager	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13336001	12/05/2013 02:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13336001	12/02/2013 11:00	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06944	Antimony	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06935	Arsenic	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06946	Barium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06947	Beryllium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
07914	Boron	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06949	Cadmium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01650	Calcium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06951	Chromium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06952	Cobalt	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06953	Copper	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01654	Iron	SW-846 6010C	1	133310637002	12/02/2013 06:52	Joanne M Gates	5
06955	Lead	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01656	Lithium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01657	Magnesium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06958	Manganese	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06960	Molybdenum	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06961	Nickel	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
10145	Phosphorus	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01662	Potassium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
01667	Sodium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06969	Tin	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06970	Titanium	SW-846 6010C	1	133310637002	12/02/2013 06:52	Joanne M Gates	5
06971	Vanadium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
06972	Zinc	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1
10146	Zirconium	SW-846 6010C	1	133310637002	12/02/2013 01:03	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-736-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7282340
LL Group # 1434844
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/18/2013 14:34

Submitted: 11/19/2013 09:50
Reported: 12/10/2013 09:28

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73634 SDG#: PH131-13*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133310637002B	12/02/2013 17:50	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133310637002A	12/02/2013 17:50	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133310637002A	12/02/2013 17:50	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133310637002A	12/02/2013 17:50	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133310638001	11/28/2013 10:55	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133310637002	11/30/2013 11:45	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133310638001	11/27/2013 22:20	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13324039401B	11/20/2013 11:15	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13330162401B	11/26/2013 23:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13327SLE026	Sample number(s): 7282326-7282332,7282334-7282340									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	109		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	98		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	101		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	103		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	115		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	96		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	105		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	104		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	94		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	96		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	102		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	106		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	93		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	97		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	92		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	98		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	104		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	106		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	103		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	93		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	93		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	101		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	107		79-112		
Batch number: 13325A94A	Sample number(s): 7282325									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	103	75-135	3	30
Batch number: 13329C16A	Sample number(s): 7282327,7282329-7282332,7282334,7282338									
11a TPH by EPA 8015B GRO	0.3	J	1.0	0.2	mg/kg	85		67-119		
Batch number: 13329C16B	Sample number(s): 7282340									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	85		67-119		
Batch number: 133300018A	Sample number(s): 7282326-7282332,7282334-7282340									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	82	83	62-87	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	99		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	108		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133290025A	Sample number(s): 7282328-7282332,7282334									
m-Terphenyl	0.17	U	0.17	0.067	mg/kg	88		64-111		
o-Terphenyl	0.17	U	0.17	0.067	mg/kg	87		75-125		
p-Terphenyl	0.17	U	0.17	0.067	mg/kg	87		69-109		
Batch number: 133290028A	Sample number(s): 7282326-7282332,7282334-7282340									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	89		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	92		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	91		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	65		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	76		60-115		
Batch number: 133310637002	Sample number(s): 7282326-7282340									
Aluminum	40.0	U	40.0	7.21	mg/kg	108		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	105		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	101		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	98		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	103		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	103		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	105		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	103		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	107		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	105		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	103		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	105		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	105		80-120		
Potassium	100 U		100.	8.34	mg/kg	104		80-120		
Sodium	100 U		100.	16.7	mg/kg	103		80-120		
Tin	1.53	J	10.0	0.220	mg/kg	99		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	103		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 133310637002A	Sample number(s): 7282326-7282340									
Silver	0.200	U	0.200	0.0260	mg/kg	112		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	115		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	119		80-120		
Batch number: 133310637002B	Sample number(s): 7282326-7282340									
Selenium	0.400	U	0.400	0.100	mg/kg	118		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133310638001	Sample number(s): 7282326-7282340								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	100		85-120		
Batch number: 13324039401A	Sample number(s): 7282326-7282330,7282333-7282337								
15a pH by 9045D					100		95-105		
Batch number: 13324039401B	Sample number(s): 7282338-7282340								
15a pH by 9045D					100		95-105		
Batch number: 13330162401A	Sample number(s): 7282326-7282329								
14a Moisture Content by 160.3					99		80-120		
Batch number: 13330162401B	Sample number(s): 7282330-7282340								
14a Moisture Content by 160.3					99		80-120		
14a Moisture Content by 160.3					99		80-120		
14a Moisture Content by 160.3					99		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13336001	Sample number(s): 7282326-7282332,7282334-7282340								
2378-TCDD	1.00 U	1.00	0.0443	ng/kg	88		67-158		
12378-PeCDD	5.00 U	5.00	0.0366	ng/kg	92		70-142		
123478-HxCDD	0.0454 J	5.00	0.0252	ng/kg	101		70-164		
123678-HxCDD	5.00 U	5.00	0.0252	ng/kg	100		76-134		
123789-HxCDD	0.0585 J	5.00	0.0243	ng/kg	101		64-162		
1234678-HpCDD	0.106 J	5.00	0.0272	ng/kg	100		70-140		
OCDD	0.239 J	10.0	0.0340	ng/kg	98		78-144		
2378-TCDF	1.00 U	1.00	0.0416	ng/kg	99		75-158		
12378-PeCDF	0.0794 J	5.00	0.0279	ng/kg	97		80-134		
23478-PeCDF	0.0526 J	5.00	0.0310	ng/kg	101		68-160		
123478-HxCDF	5.00 U	5.00	0.0268	ng/kg	102		72-134		
123678-HxCDF	0.0269 J	5.00	0.0241	ng/kg	102		84-130		
123789-HxCDF	0.0652 J	5.00	0.0269	ng/kg	103		78-130		
234678-HxCDF	0.0320 J	5.00	0.0259	ng/kg	103		70-156		
1234678-HpCDF	0.0859 J	5.00	0.00960	ng/kg	102		82-122		
1234789-HpCDF	0.0848 J	5.00	0.0149	ng/kg	105		78-138		
OCDF	0.227 J	10.0	0.0456	ng/kg	101		63-170		
TEQ WHO 2005 - EDLx0.0	0.0213			ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13327SLE026	Sample number(s): 7282326-7282332,7282334-7282340 UNSPK: 7282330								
Acenaphthene	100	109	48-127	9	30				
Acenaphthylene	93	95	49-121	2	30				
Anthracene	92	95	52-126	3	30				
Benzo(a)anthracene	95	98	44-143	3	30				
Benzo(a)pyrene	92	95	44-140	3	30				
Benzo(b)fluoranthene	48	69	26-142	20	30				
Benzo(e)pyrene	84	87	70-130	4	30				
Benzo(g,h,i)perylene	80	73	33-141	9	30				
Benzo(k)fluoranthene	92	133	54-142	37*	30				
Butylbenzylphthalate	85	94	49-151	10	30				
Di-n-butylphthalate	75	85	52-147	13	30				
Chrysene	94	99	29-148	5	30				
Dibenz(a,h)anthracene	94	91	20-137	3	30				
Diethylphthalate	88	97	43-145	9	30				
Dimethylphthalate	95	99	58-129	4	30				
Bis(2-Ethylhexyl)phthalate	93	95	39-167	2	30				
Fluoranthene	64	64	40-148	1	30				
Fluorene	93	100	51-137	7	30				
Indeno(1,2,3-cd)pyrene	88	83	17-136	5	30				
1-Methylnaphthalene	102	105	50-131	2	30				
2-Methylnaphthalene	100	102	35-152	2	30				
Naphthalene	99	101	31-148	2	30				
N-Nitrosodimethylamine	74	82	48-113	10	30				
Di-n-octylphthalate	90	96	52-162	6	30				
Phenanthrene	88	88	29-142	1	30				
Pyrene	79	87	26-143	8	30				
Batch number: 13329C16A	Sample number(s): 7282327,7282329-7282332,7282334,7282338 UNSPK: 7282330								
11a TPH by EPA 8015B GRO	84	86	69-123	10	30				
Batch number: 13329C16B	Sample number(s): 7282340 UNSPK: 7282330								
11a TPH by EPA 8015B GRO	84	86	69-123	10	30				
Batch number: 133300018A	Sample number(s): 7282326-7282332,7282334-7282340 UNSPK: 7282330								
PCB-1016	97	97	41-135	0	50				
PCB-1260	106	105	40-134	0	50				
Batch number: 133290025A	Sample number(s): 7282328-7282332,7282334 UNSPK: 7282330								
m-Terphenyl	95	116	75-125	21*	20				
o-Terphenyl	91	94	75-125	4	20				
p-Terphenyl	91	95	75-125	5	20				
Batch number: 133290028A	Sample number(s): 7282326-7282332,7282334-7282340 UNSPK: 7282330								
EFH (C12-C14)	89	88	49-123	2	20				
EFH (C15-C20)	63	75	49-123	12	20				
EFH (C21-C30)	-19*	5*	49-123	20	20				
EFH (C30-C40)	-148*	-100*	49-123	39*	20				
EFH (C8-C11)	82	80	49-123	2	20				
Batch number: 133310637002	Sample number(s): 7282326-7282340 UNSPK: 7282330 BKG: 7282330								
Aluminum	1647	2161	75-125	6	20	14,700	15,000	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
	(2)	(2)							
Antimony	62*	65*	75-125	4	20	3.96 U	3.96 U	0 (1)	20
Arsenic	98	100	75-125	2	20	3.72 J	3.68 J	1 (1)	20
Barium	99	100	75-125	0	20	82.6	83.5	1	20
Beryllium	103	105	75-125	2	20	0.591 J	0.594 J	1 (1)	20
Boron	94	97	75-125	3	20	2.10 J	1.92 J	9 (1)	20
Cadmium	93	94	75-125	0	20	0.990 U	0.990 U	0 (1)	20
Calcium	111 (2)	154 (2)	75-125	6	20	2,540	2,570	1	20
Chromium	105	111	75-125	3	20	17.8	18.4	3	20
Cobalt	94	95	75-125	1	20	4.89	4.71	4 (1)	20
Copper	94	96	75-125	2	20	5.63	5.36	5 (1)	20
Iron	1216	1372	75-125	1	20	19,600	19,800	1	20
	(2)	(2)							
Lead	100	95	75-125	3	20	7.73	7.67	1 (1)	20
Lithium	100	103	75-125	3	20	21.6	22.0	2	20
Magnesium	242 (2)	325 (2)	75-125	3	20	4,220	4,300	2	20
Manganese	173 (2)	119 (2)	75-125	7	20	311	299	4	20
Molybdenum	95	97	75-125	1	20	0.797 J	0.795 J	0 (1)	20
Nickel	97	98	75-125	1	20	10.5	10.7	2	20
Phosphorus	94	68*	75-125	6	20	358	328	9	20
Potassium	129*	126*	75-125	1	20	2,730	2,750	1	20
Sodium	97	100	75-125	3	20	88.9 J	93.8 J	5 (1)	20
Tin	85	86	75-125	1	20	2.72 J	2.74 J	1 (1)	20
Titanium	252 (2)	302 (2)	75-125	4	20	1,010	1,070	6	20
Vanadium	106	109	75-125	2	20	33.4	34.0	2	20
Zinc	100	100	75-125	0	20	50.2	50.1	0	20
Zirconium	93	96	75-125	3	20	2.68 J	2.93 J	9 (1)	20
Batch number: 133310637002A	Sample number(s): 7282326-7282340 UNSPK: 7282330 BKG: 7282330								
Silver	109	114	75-125	4	20	0.155 J	0.124 J	22* (1)	20
Strontium	108	128*	75-125	5	20	23.7	21.5	9	20
Thallium	108	120	75-125	7	20	0.267	0.243	10 (1)	20
Batch number: 133310637002B	Sample number(s): 7282326-7282340 UNSPK: 7282330 BKG: 7282330								
Selenium	107	108	75-125	1	20	0.141 J	0.131 J	8 (1)	20
Batch number: 133310638001	Sample number(s): 7282326-7282340 UNSPK: 7282330 BKG: 7282330								
3a Mercury 7471A	110	113	65-135	6	20	0.0164 U	0.0159 U	0 (1)	20
Batch number: 13324039401A	Sample number(s): 7282326-7282330,7282333-7282337 BKG: 7282330								
15a pH by 9045D						6.63	6.67	1	3
Batch number: 13324039401B	Sample number(s): 7282338-7282340 BKG: 7282340								
15a pH by 9045D						6.78	6.73	1	3
Batch number: 13330162401A	Sample number(s): 7282326-7282329 BKG: P280198								
14a Moisture Content by 160.3						9.5	9.3	2	20
Batch number: 13330162401B	Sample number(s): 7282330-7282340 BKG: 7282330								
14a Moisture Content by 160.3						2.3	2.3	1	20
14a Moisture Content by 160.3						2.3	2.3	1	20
14a Moisture Content by 160.3						2.3	2.3	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13336001	Sample number(s): 7282326-7282332,7282334-7282340 UNSPK: 7282330								
2378-TCDD	92	89	40-135	4	20				
12378-PeCDD	96	96	40-135	2	20				
123478-HxCDD	101	100	40-135	2	20				
123678-HxCDD	100	102	40-135	1	20				
123789-HxCDD	101	99	40-135	3	20				
1234678-HpCDD	93	93	40-135	1	20				
OCDD	57	67	40-135	9	20				
2378-TCDF	99	97	40-135	3	20				
12378-PeCDF	100	102	40-135	1	20				
23478-PeCDF	102	101	40-135	2	20				
123478-HxCDF	103	104	40-135	0	20				
123678-HxCDF	101	103	40-135	0	20				
123789-HxCDF	104	103	40-135	2	20				
234678-HxCDF	103	103	40-135	2	20				
1234678-HpCDF	99	99	40-135	1	20				
1234789-HpCDF	102	104	40-135	1	20				
OCDF	97	97	40-135	1	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13327SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7282326	67	77	94
7282327	58	81	98
7282328	78	88	101
7282329	72	81	97
7282330	69	80	96
7282331	63	82	97
7282332	62	84	99
7282334	57	85	96
7282335	70	83	92
7282336	78	85	97
7282337	64	77	93
7282338	67	87	100
7282339	65	73	90
7282340	77	83	95
Blank	78	86	97
LCS	81	88	99
MS	63	82	97
MSD	62	84	99

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Surrogate Quality Control

Limits: 54-129 59-125 61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13325A94A

	Trifluorotoluene-F
7282325	87
Blank	85
LCS	92
LCSD	90

Limits: 63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13329C16A

	Trifluorotoluene-F
7282327	93
7282329	95
7282330	94
7282331	97
7282332	98
7282334	96
7282338	94
Blank	96
LCS	101
MS	97
MSD	98

Limits: 50-142

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13329C16B

	Trifluorotoluene-F
7282340	94
Blank	113
LCS	101
MS	97
MSD	98

Limits: 50-142

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133300018A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7282326	105	101
7282327	112	118
7282328	112	115
7282329	105	104
7282330	111	111
7282331	107	113
7282332	108	107
7282334	115	118
7282335	111	106

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Surrogate Quality Control

7282336	112	110
7282337	112	101
7282338	107	106
7282339	108	111
7282340	107	107
Blank	114	113
LCS	112	115
LCSD	113	113
MS	107	113
MSD	108	107
Limits:	45-120	45-120

Analysis Name: 27a Terphenyls by 8015B
Batch number: 133290025A

	n-Triacontane-d62
7282328	100
7282329	110
7282330	104
7282331	98
7282332	102
7282334	101
Blank	101
LCS	94
MS	98
MSD	102
Limits:	19-152

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133290028A

	Chlorobenzene	Orthoterphenyl
7282326	92	87
7282327	95	89
7282328	95	90
7282329	91	87
7282330	97	90
7282331	98	90
7282332	94	89
7282334	87	85
7282335	89	86
7282336	82	78
7282337	89	85
7282338	92	86
7282339	92	87
7282340	92	86
Blank	96	87
LCS	93	90
MS	98	90
MSD	94	89
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Surrogate Quality Control

Batch number: 13336001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7282326	74	67	72	76	84	102
7282327	62	53	65	68	71	70
7282328	80	58	64	74	74	62
7282329	75	75	66	73	67	61
7282330	62	66	70	78	78	78
7282331	58	63	57	64	64	59
7282332	69	73	71	74	76	73
7282334	65	66	65	63	60	59
7282335	61	56	61	66	66	66
7282336	55	49	60	65	65	69
7282337	74	70	68	73	69	76
7282338	63	64	68	74	76	76
7282339	59	53	58	64	63	65
7282340	69	73	68	74	69	83
Blank	58	33	54	60	55	56
MS	58	63	57	64	64	59
MSD	69	73	71	74	76	73
OPR	59	59	56	61	62	58
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7282326	91	71	78	78	99	104
7282327	91	59	63	63	85	90
7282328	83	61	77	58	81	80
7282329	79	62	60	83	74	67
7282330	76	66	78	71	84	85
7282331	65	52	52	72	72	72
7282332	86	61	60	77	84	82
7282334	70	57	50	74	69	72
7282335	76	50	48	59	75	77
7282336	70	57	52	55	71	71
7282337	79	60	57	73	76	75
7282338	86	63	57	72	85	82
7282339	68	51	54	60	68	68
7282340	89	67	60	76	73	74
Blank	73	51	50	39	64	65
MS	65	52	52	72	72	72
MSD	86	61	60	77	84	82
OPR	87	52	38	69	72	74
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7282326	108	77	80	63	73
7282327	83	81	76	55	58
7282328	80	75	95	54	59
7282329	64	80	76	60	73
7282330	78	74	82	60	65
7282331	66	61	60	50	73
7282332	83	74	70	62	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1434844
Reported: 12/10/13 at 09:28 AM

Surrogate Quality Control

7282334	64	67	57	54	71
7282335	74	67	57	53	60
7282336	70	71	62	49	57
7282337	78	69	66	62	67
7282338	82	77	68	58	70
7282339	69	58	61	49	56
7282340	71	75	70	57	75
Blank	63	61	61	43	39
MS	66	61	60	50	73
MSD	83	74	70	62	76
OPR	69	76	49	49	60
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1434844 7282325-40

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/18/2013
CarrierName: FedEx
AirbillNo: 8017 8586 9939

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131118-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-111813	11/18/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X												
SL-696-SA5A-SB-0.0-0.5	11/18/13 08:56	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-696-SA5A-SB-0.0-0.5	11/18/13 08:56	SO	None	1 - 4 oz glass	10 day													X																		
SL-696-SA5A-SB-4.0-5.0	11/18/13 09:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-696-SA5A-SB-4.0-5.0	11/18/13 09:05	SO	None	2 - Encore	10 day																			X												
SL-709-SA5A-SB-0.0-0.5	11/18/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X			X							
SL-709-SA5A-SB-0.0-0.5	11/18/13 10:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-1009-SA5A-SB-4.0-5.0	11/18/13 10:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X			X							
SL-1009-SA5A-SB-4.0-5.0	11/18/13 10:20	SO	None	2 - Encore	10 day																			X												
SL-709-SA5A-SB-4.0-5.0MS	11/18/13 10:15	SO	None	6 - 16 oz glass	10 day	X	X					X		X	X			X								X			X							
SL-709-SA5A-SB-4.0-5.0MS	11/18/13 10:15	SO	None	6 - Encore	10 day																			X												
SL-709-SA5A-SB-8.0-9.0	11/18/13 10:25	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X			X							
SL-709-SA5A-SB-8.0-9.0	11/18/13 10:25	SO	None	2 - Encore	10 day																			X												
SL-735-SA5A-SB-2.5-3.5	11/18/13 14:00	SO	None	2 - Encore	10 day																			X												
SL-736-SA5A-SB-3.0-4.0	11/18/13 14:34	SO	None	2 - Encore	10 day																			X												

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/18/13	1600									
										11/19/13	0950

13013 1434844 7282325-40

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/18/2013
CarrierName: FedEx
AirbillNo: 8017 8586 9939

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131118-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-710-SA5A-SB-0.0-0.5	11/18/13 12:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-710-SA5A-SB-0.0-0.5	11/18/13 12:50	SO	None	1 - 4 oz glass	10 day														X																	
SL-722-SA5A-SB-0.0-0.5	11/18/13 13:22	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-722-SA5A-SB-0.0-0.5	11/18/13 13:22	SO	None	1 - 4 oz glass	10 day														X																	
SL-735-SA5A-SB-0.0-0.5	11/18/13 13:57	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-735-SA5A-SB-0.0-0.5	11/18/13 13:57	SO	None	1 - 4 oz glass	10 day														X																	
SL-735-SA5A-SB-2.5-3.5	11/18/13 14:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										
SL-736-SA5A-SB-0.0-0.5	11/18/13 14:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-736-SA5A-SB-0.0-0.5	11/18/13 14:30	SO	None	1 - 4 oz glass	10 day														X																	
SL-736-SA5A-SB-3.0-4.0	11/18/13 14:34	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X				X							X										

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/18/13	1605									
										11/19/13	0950

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Environmental Sample Administration Receipt Documentation Log

1434844

Client/Project: CDM Smith

Date of Receipt: 11/19/13

Time of Receipt: 0950

Source Code: 50-1

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.7	TB	WI	Y	B	
2	↓	0.9	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/19/13 1039

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 12, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/20/2013
Group Number: 1435253
SDG: PH132
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
TB-111913 Water	7284464
SL-518-SA5A-SB-0.0-0.5 Soil	7284465
SL-518-SA5A-SB-7.0-8.0 Soil	7284466
SL-518-SA5A-SB-10.0-11.0 Soil	7284467
SL-518-SA5A-SB-15.0-16.0 Soil	7284468
SL-596-SA5A-SB-0.0-0.5 Soil	7284469
SL-596-SA5A-SB-4.0-5.0 Soil	7284470
SL-708-SA5A-SB-0.0-0.5 Soil	7284471
SL-708-SA5A-SB-0.0-0.5MS Soil	7284472
SL-708-SA5A-SB-0.0-0.5MSD Soil	7284473
SL-708-SA5A-SB-0.0-0.5DUP Soil	7284474
SL-1008-SA5A-SB-0.0-0.5 Soil	7284475
SL-708-SA5A-SB-4.0-5.0 Soil	7284476
SL-732-SA5A-SB-0.0-0.5 Soil	7284477
EB-111913 Water	7284478

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: TB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284464
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132TB SDG#: PH132-01TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/22/2013 00:47	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/22/2013 00:47	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.4	J	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	4.5		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	4.5		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	7.0		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	2.0		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	2.2		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	6.5		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	0.71	J	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	6.5		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.0		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	7.0		1.7	0.70	1
12969	Pyrene	129-00-0	9.0		1.7	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	9.4	J	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.9	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	11		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,100		40.8	7.35	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.754	1
06935	Arsenic	7440-38-2	4.60		4.08	0.713	1
06946	Barium	7440-39-3	82.0		1.02	0.0336	1
06947	Beryllium	7440-41-7	0.480	J	1.02	0.0683	1
07914	Boron	7440-42-8	2.91	J	10.2	0.856	1
06949	Cadmium	7440-43-9	0.201	J	1.02	0.0774	1
01650	Calcium	7440-70-2	2,660		20.4	3.40	1
06951	Chromium	7440-47-3	17.1		3.06	0.163	1
06952	Cobalt	7440-48-4	4.56		1.02	0.101	1
06953	Copper	7440-50-8	7.73		2.04	0.295	1
01654	Iron	7439-89-6	19,900		40.8	3.69	1
06955	Lead	7439-92-1	7.44		3.06	0.509	1
01656	Lithium	7439-93-2	22.6		4.1	0.35	1
01657	Magnesium	7439-95-4	4,040		10.2	1.70	1
06958	Manganese	7439-96-5	289		1.02	0.0846	1
06960	Molybdenum	7439-98-7	0.363	J	2.04	0.173	1
06961	Nickel	7440-02-0	7.57		2.04	0.132	1
10145	Phosphorus	7723-14-0	331		10.2	2.94	1
01662	Potassium	7440-09-7	2,720		102	8.50	1
01667	Sodium	7440-23-5	81.2	J	102	17.0	1
06969	Tin	7440-31-5	2.75	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,050		1.02	0.173	1
06971	Vanadium	7440-62-2	30.5		1.02	0.132	1
06972	Zinc	7440-66-6	54.4		4.08	0.204	1
10146	Zirconium	7440-67-7	1.91	J	5.09	0.856	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.408	U	0.408	0.102	2
06142	Silver	7440-22-4	0.0793	J	0.204	0.0265	2
06144	Strontium	7440-24-6	13.7		0.408	0.0693	2
06145	Thallium	7440-28-0	0.234		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0157	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.11		0.0100	0.0100	1
	The pH was measured in water at 20.2 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0659	JQ	1.03	0.0605	1
11031	12378-PeCDD	40321-76-4	0.0720	JBQ	5.17	0.0461	1
11031	123478-HxCDD	39227-28-6	0.152	JB	5.17	0.0409	1
11031	123678-HxCDD	57653-85-7	0.755	JBQ	5.17	0.0437	1
11031	123789-HxCDD	19408-74-3	0.420	JBQ	5.17	0.0397	1
11031	1234678-HpCDD	35822-46-9	24.7	B	5.17	0.0501	1
11031	OCDD	3268-87-9	269	B	10.3	0.0350	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0573	1
11031	12378-PeCDF	57117-41-6	0.348	JB	5.17	0.0273	1
11031	23478-PeCDF	57117-31-4	0.109	JB	5.17	0.0248	1
11031	123478-HxCDF	70648-26-9	0.204	JBQ	5.17	0.0276	1
11031	123678-HxCDF	57117-44-9	0.151	JBQ	5.17	0.0268	1
11031	123789-HxCDF	72918-21-9	0.182	JB	5.17	0.0232	1
11031	234678-HxCDF	60851-34-5	0.163	JB	5.17	0.0252	1
11031	1234678-HpCDF	67562-39-4	4.71	JB	5.17	0.0199	1
11031	1234789-HpCDF	55673-89-7	0.290	JB	5.17	0.0226	1
11031	OCDF	39001-02-0	22.1	B	10.3	0.0240	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.477				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	98	23 - 140
13C12-OCDD	110	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	103	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	106	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 07:23	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 06:20	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 20:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 13:47	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:06	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:12	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:12	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:52	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:52	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284465
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:45

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51800 SDG#: PH132-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 12:54	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	62		23	8	1.03
10237	Acrolein	107-02-8	110	U	110	23	1.03
10237	Acrylonitrile	107-13-1	23	U	23	5	1.03
10237	t-Amyl methyl ether	994-05-8	6	U	6	1	1.03
10237	Benzene	71-43-2	6	U	6	0.6	1.03
10237	Bromobenzene	108-86-1	6	U	6	1	1.03
10237	Bromochloromethane	74-97-5	6	U	6	1	1.03
10237	Bromodichloromethane	75-27-4	6	U	6	1	1.03
10237	Bromoform	75-25-2	6	U	6	1	1.03
10237	Bromomethane	74-83-9	6	U	6	2	1.03
10237	2-Butanone	78-93-3	12		11	5	1.03
10237	t-Butyl alcohol	75-65-0	57	U	57	23	1.03
10237	n-Butylbenzene	104-51-8	6	U	6	1	1.03
10237	sec-Butylbenzene	135-98-8	6	U	6	1	1.03
10237	tert-Butylbenzene	98-06-6	6	U	6	1	1.03
10237	Carbon Disulfide	75-15-0	6	U	6	1	1.03
10237	Carbon Tetrachloride	56-23-5	6	U	6	1	1.03
10237	Chlorobenzene	108-90-7	6	U	6	1	1.03
10237	Chloroethane	75-00-3	6	U	6	2	1.03
10237	2-Chloroethyl Vinyl Ether	110-75-8	11	U	11	2	1.03
10237	Chloroform	67-66-3	6	U	6	1	1.03
10237	1-Chlorohexane	544-10-5	6	U	6	1	1.03
10237	Chloromethane	74-87-3	6	U	6	2	1.03
10237	2-Chlorotoluene	95-49-8	6	U	6	1	1.03
10237	4-Chlorotoluene	106-43-4	6	U	6	1	1.03
10237	Chlorotrifluoroethene	79-38-9	6	U	6	2	1.03
10237	1,2-Dibromo-3-chloropropane	96-12-8	6	U	6	2	1.03
10237	Dibromochloromethane	124-48-1	6	U	6	1	1.03
10237	1,2-Dibromoethane	106-93-4	6	U	6	1	1.03
10237	Dibromomethane	74-95-3	6	U	6	1	1.03
10237	1,2-Dichlorobenzene	95-50-1	6	U	6	1	1.03
10237	1,3-Dichlorobenzene	541-73-1	6	U	6	1	1.03
10237	1,4-Dichlorobenzene	106-46-7	6	U	6	1	1.03
10237	Dichlorodifluoromethane	75-71-8	6	U	6	2	1.03
10237	1,1-Dichloroethane	75-34-3	6	U	6	1	1.03
10237	1,2-Dichloroethane	107-06-2	6	U	6	1	1.03
10237	1,1-Dichloroethene	75-35-4	6	U	6	1	1.03
10237	cis-1,2-Dichloroethene	156-59-2	6	U	6	1	1.03
10237	trans-1,2-Dichloroethene	156-60-5	6	U	6	1	1.03
10237	1,2-Dichloropropane	78-87-5	6	U	6	1	1.03
10237	1,3-Dichloropropane	142-28-9	6	U	6	1	1.03
10237	2,2-Dichloropropane	594-20-7	6	U	6	1	1.03
10237	1,1-Dichloropropene	563-58-6	6	U	6	1	1.03
10237	cis-1,3-Dichloropropene	10061-01-5	6	U	6	1	1.03
10237	trans-1,3-Dichloropropene	10061-02-6	6	U	6	1	1.03
10237	Ethyl t-butyl ether	637-92-3	6	U	6	1	1.03
10237	Ethylbenzene	100-41-4	6	U	6	1	1.03
10237	Freon 113	76-13-1	6	U	6	2	1.03
10237	Freon 133a	75-88-7	6	U	6	2	1.03
10237	Hexachlorobutadiene	87-68-3	6	U	6	2	1.03
10237	2-Hexanone	591-78-6	11	U	11	3	1.03

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	6	U	6	1	1.03
10237	Isopropylbenzene	98-82-8	6	U	6	1	1.03
10237	p-Isopropyltoluene	99-87-6	6	U	6	1	1.03
10237	Methyl Iodide	74-88-4	6	U	6	3	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	6	U	6	0.6	1.03
10237	4-Methyl-2-pentanone	108-10-1	11	U	11	3	1.03
10237	Methylene Chloride	75-09-2	6	U	6	2	1.03
10237	n-Propylbenzene	103-65-1	6	U	6	1	1.03
10237	Styrene	100-42-5	6	U	6	1	1.03
10237	1,1,1,2-Tetrachloroethane	630-20-6	6	U	6	1	1.03
10237	1,1,2,2-Tetrachloroethane	79-34-5	6	U	6	1	1.03
10237	Tetrachloroethene	127-18-4	6	U	6	1	1.03
10237	Toluene	108-88-3	6	U	6	1	1.03
10237	1,2,3-Trichlorobenzene	87-61-6	6	U	6	1	1.03
10237	1,2,4-Trichlorobenzene	120-82-1	6	U	6	1	1.03
10237	1,1,1-Trichloroethane	71-55-6	6	U	6	1	1.03
10237	1,1,2-Trichloroethane	79-00-5	6	U	6	1	1.03
10237	Trichloroethene	79-01-6	6	U	6	1	1.03
10237	Trichlorofluoromethane	75-69-4	6	U	6	2	1.03
10237	1,2,3-Trichloropropane	96-18-4	6	U	6	1	1.03
10237	1,2,4-Trimethylbenzene	95-63-6	6	U	6	1	1.03
10237	1,3,5-Trimethylbenzene	108-67-8	6	U	6	1	1.03
10237	Vinyl Acetate	108-05-4	11	U	11	2	1.03
10237	Vinyl Chloride	75-01-4	6	U	6	1	1.03
10237	m+p-Xylene	179601-23-1	6	U	6	1	1.03
10237	o-Xylene	95-47-6	6	U	6	1	1.03
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	18	U	18	6.0	27.11

The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.

GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	0.67	J	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	7.8		1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	0.75	J	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.74	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.1	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	23.54
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	4.4	J	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	16		5.5	2.2	1
12952	EFH (C30-C40)	n.a.	25		11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,900		43.8	7.90	1
06944	Antimony	7440-36-0	4.38	U	4.38	0.810	1
06935	Arsenic	7440-38-2	3.22	J	4.38	0.767	1
06946	Barium	7440-39-3	81.8		1.10	0.0361	1
06947	Beryllium	7440-41-7	0.422	J	1.10	0.0734	1
07914	Boron	7440-42-8	3.17	J	11.0	0.920	1
06949	Cadmium	7440-43-9	0.180	J	1.10	0.0832	1
01650	Calcium	7440-70-2	2,750		21.9	3.66	1
06951	Chromium	7440-47-3	12.1		3.29	0.175	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06952	Cobalt	7440-48-4	3.97		1.10	0.108	1
06953	Copper	7440-50-8	6.48		2.19	0.318	1
01654	Iron	7439-89-6	17,300		43.8	3.96	1
06955	Lead	7439-92-1	5.19		3.29	0.548	1
01656	Lithium	7439-93-2	24.9		4.4	0.37	1
01657	Magnesium	7439-95-4	3,670		11.0	1.83	1
06958	Manganese	7439-96-5	214		1.10	0.0909	1
06960	Molybdenum	7439-98-7	0.189	J	2.19	0.186	1
06961	Nickel	7440-02-0	5.43		2.19	0.142	1
10145	Phosphorus	7723-14-0	322		11.0	3.17	1
01662	Potassium	7440-09-7	3,140		110	9.13	1
01667	Sodium	7440-23-5	76.7	J	110	18.3	1
06969	Tin	7440-31-5	2.75	J	11.0	0.241	1
06970	Titanium	7440-32-6	1,000		1.10	0.186	1
06971	Vanadium	7440-62-2	25.5		1.10	0.142	1
06972	Zinc	7440-66-6	56.2		4.38	0.219	1
10146	Zirconium	7440-67-7	1.10	J	5.48	0.920	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.438	U	0.438	0.110	2
06142	Silver	7440-22-4	0.219	U	0.219	0.0285	2
06144	Strontium	7440-24-6	13.3		0.438	0.0745	2
06145	Thallium	7440-28-0	0.228		0.219	0.0329	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0127	J	0.0175	0.0105	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.87		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.6		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.10 U	1.10	0.0642	1
11031	12378-PeCDD	40321-76-4	0.0586 JBQ	5.48	0.0462	1
11031	123478-HxCDD	39227-28-6	0.0359 JBQ	5.48	0.0277	1
11031	123678-HxCDD	57653-85-7	0.181 JBQ	5.48	0.0278	1
11031	123789-HxCDD	19408-74-3	0.110 JBQ	5.48	0.0273	1
11031	1234678-HpCDD	35822-46-9	0.727 JBQ	5.48	0.0319	1
11031	OCDD	3268-87-9	4.74 JB	11.0	0.0202	1
11031	2378-TCDF	51207-31-9	1.10 U	1.10	0.0659	1
11031	12378-PeCDF	57117-41-6	0.0623 JBQ	5.48	0.0262	1
11031	23478-PeCDF	57117-31-4	0.0838 JB	5.48	0.0238	1
11031	123478-HxCDF	70648-26-9	0.0777 JBQ	5.48	0.0206	1
11031	123678-HxCDF	57117-44-9	0.0590 JB	5.48	0.0200	1
11031	123789-HxCDF	72918-21-9	0.165 JBQ	5.48	0.0175	1
11031	234678-HxCDF	60851-34-5	0.0487 JBQ	5.48	0.0186	1
11031	1234678-HpCDF	67562-39-4	0.182 JB	5.48	0.0125	1
11031	1234789-HpCDF	55673-89-7	0.0553 JBQ	5.48	0.0149	1
11031	OCDF	39001-02-0	0.357 JBQ	11.0	0.0289	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0342			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	98	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	86	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	86	28 - 136
13C12-123789-HxCDF	104	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	101	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 02:39	Sara E Johnson	1.03
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 18:31	Jason M Long	27.11
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	3	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201332433189	11/20/2013 17:05	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	2	201332433189	11/20/2013 17:05	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	3	201332433189	11/20/2013 17:06	Mitchell R Washel	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 07:54	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/26/2013 23:27	Laura M Krieger	23.54
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332433189	11/20/2013 17:03	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332433189	11/20/2013 17:03	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 06:38	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 20:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 14:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-7.0-8.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284466
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 08:55

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51878 SDG#: PH132-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:10	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:15	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:15	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:54	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:54	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 12:56	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
10237	Acetone	67-64-1	29		20	7	0.89
10237	Acrolein	107-02-8	100	U	100	20	0.89
10237	Acrylonitrile	107-13-1	20	U	20	4	0.89
10237	t-Amyl methyl ether	994-05-8	5	U	5	1	0.89
10237	Benzene	71-43-2	5	U	5	0.5	0.89
10237	Bromobenzene	108-86-1	5	U	5	1	0.89
10237	Bromochloromethane	74-97-5	5	U	5	1	0.89
10237	Bromodichloromethane	75-27-4	5	U	5	1	0.89
10237	Bromoform	75-25-2	5	U	5	1	0.89
10237	Bromomethane	74-83-9	5	U	5	2	0.89
10237	2-Butanone	78-93-3	5	J	10	4	0.89
10237	t-Butyl alcohol	75-65-0	50	U	50	20	0.89
10237	n-Butylbenzene	104-51-8	5	U	5	1	0.89
10237	sec-Butylbenzene	135-98-8	5	U	5	1	0.89
10237	tert-Butylbenzene	98-06-6	5	U	5	1	0.89
10237	Carbon Disulfide	75-15-0	5	U	5	1	0.89
10237	Carbon Tetrachloride	56-23-5	5	U	5	1	0.89
10237	Chlorobenzene	108-90-7	5	U	5	1	0.89
10237	Chloroethane	75-00-3	5	U	5	2	0.89
10237	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	0.89
10237	Chloroform	67-66-3	5	U	5	1	0.89
10237	1-Chlorohexane	544-10-5	5	U	5	1	0.89
10237	Chloromethane	74-87-3	5	U	5	2	0.89
10237	2-Chlorotoluene	95-49-8	5	U	5	1	0.89
10237	4-Chlorotoluene	106-43-4	5	U	5	1	0.89
10237	Chlorotrifluoroethene	79-38-9	5	U	5	2	0.89
10237	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	0.89
10237	Dibromochloromethane	124-48-1	5	U	5	1	0.89
10237	1,2-Dibromoethane	106-93-4	5	U	5	1	0.89
10237	Dibromomethane	74-95-3	5	U	5	1	0.89
10237	1,2-Dichlorobenzene	95-50-1	5	U	5	1	0.89
10237	1,3-Dichlorobenzene	541-73-1	5	U	5	1	0.89
10237	1,4-Dichlorobenzene	106-46-7	5	U	5	1	0.89
10237	Dichlorodifluoromethane	75-71-8	5	U	5	2	0.89
10237	1,1-Dichloroethane	75-34-3	5	U	5	1	0.89
10237	1,2-Dichloroethane	107-06-2	5	U	5	1	0.89
10237	1,1-Dichloroethene	75-35-4	5	U	5	1	0.89
10237	cis-1,2-Dichloroethene	156-59-2	5	U	5	1	0.89
10237	trans-1,2-Dichloroethene	156-60-5	5	U	5	1	0.89
10237	1,2-Dichloropropane	78-87-5	5	U	5	1	0.89
10237	1,3-Dichloropropane	142-28-9	5	U	5	1	0.89
10237	2,2-Dichloropropane	594-20-7	5	U	5	1	0.89
10237	1,1-Dichloropropene	563-58-6	5	U	5	1	0.89
10237	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	0.89
10237	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	0.89
10237	Ethyl t-butyl ether	637-92-3	5	U	5	1	0.89
10237	Ethylbenzene	100-41-4	5	U	5	1	0.89
10237	Freon 113	76-13-1	5	U	5	2	0.89
10237	Freon 133a	75-88-7	5	U	5	2	0.89
10237	Hexachlorobutadiene	87-68-3	5	U	5	2	0.89
10237	2-Hexanone	591-78-6	10	U	10	3	0.89

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	di-Isopropyl ether	108-20-3	5	U	5	1	0.89
10237	Isopropylbenzene	98-82-8	5	U	5	1	0.89
10237	p-Isopropyltoluene	99-87-6	5	U	5	1	0.89
10237	Methyl Iodide	74-88-4	5	U	5	3	0.89
10237	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	0.89
10237	4-Methyl-2-pentanone	108-10-1	10	U	10	3	0.89
10237	Methylene Chloride	75-09-2	5	U	5	2	0.89
10237	n-Propylbenzene	103-65-1	5	U	5	1	0.89
10237	Styrene	100-42-5	5	U	5	1	0.89
10237	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	0.89
10237	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	0.89
10237	Tetrachloroethene	127-18-4	5	U	5	1	0.89
10237	Toluene	108-88-3	5	U	5	1	0.89
10237	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	0.89
10237	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	0.89
10237	1,1,1-Trichloroethane	71-55-6	5	U	5	1	0.89
10237	1,1,2-Trichloroethane	79-00-5	5	U	5	1	0.89
10237	Trichloroethene	79-01-6	5	U	5	1	0.89
10237	Trichlorofluoromethane	75-69-4	5	U	5	2	0.89
10237	1,2,3-Trichloropropane	96-18-4	5	U	5	1	0.89
10237	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	0.89
10237	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	0.89
10237	Vinyl Acetate	108-05-4	10	U	10	2	0.89
10237	Vinyl Chloride	75-01-4	5	U	5	1	0.89
10237	m+p-Xylene	179601-23-1	5	U	5	1	0.89
10237	o-Xylene	95-47-6	5	U	5	1	0.89
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	15	U	15	5.0	22.12

The surrogate recovery for toluene-d8 is outside of QC limits for the GC/MS volatile fraction. The surrogate was mis-spiked in the sample vial which resulted in a saturated peak. The analysis was not repeated.

GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	0.60	J	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.4	J	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	0.75	J	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	0.75	J	1.8	0.74	1
12969	Naphthalene	91-20-3	0.88	J	1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	0.89	J	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	22.6
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.7	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	4.9	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.6	U	5.6	2.2	1
12952	EFH (C15-C20)	n.a.	4.6	J	5.6	2.2	1
12952	EFH (C21-C30)	n.a.	11		5.6	2.2	1
12952	EFH (C30-C40)	n.a.	21		11	4.5	1
12952	EFH (C8-C11)	n.a.	5.6	U	5.6	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		44.0	7.93	1
06944	Antimony	7440-36-0	4.40	U	4.40	0.814	1
06935	Arsenic	7440-38-2	3.69	J	4.40	0.770	1
06946	Barium	7440-39-3	112		1.10	0.0363	1
06947	Beryllium	7440-41-7	0.542	J	1.10	0.0737	1
07914	Boron	7440-42-8	4.02	J	11.0	0.924	1
06949	Cadmium	7440-43-9	0.246	J	1.10	0.0836	1
01650	Calcium	7440-70-2	2,050		22.0	3.68	1
06951	Chromium	7440-47-3	15.7		3.30	0.176	1
06952	Cobalt	7440-48-4	5.23		1.10	0.109	1
06953	Copper	7440-50-8	10.1		2.20	0.319	1
01654	Iron	7439-89-6	18,800		44.0	3.98	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06955	Lead	7439-92-1	7.67		3.30	0.550	1
01656	Lithium	7439-93-2	19.3		4.4	0.37	1
01657	Magnesium	7439-95-4	3,530		11.0	1.84	1
06958	Manganese	7439-96-5	280		1.10	0.0913	1
06960	Molybdenum	7439-98-7	0.343	J	2.20	0.187	1
06961	Nickel	7440-02-0	7.77		2.20	0.143	1
10145	Phosphorus	7723-14-0	319		11.0	3.18	1
01662	Potassium	7440-09-7	2,890		110	9.18	1
01667	Sodium	7440-23-5	102	J	110	18.4	1
06969	Tin	7440-31-5	2.73	J	11.0	0.242	1
06970	Titanium	7440-32-6	1,030		1.10	0.187	1
06971	Vanadium	7440-62-2	30.0		1.10	0.143	1
06972	Zinc	7440-66-6	53.5		4.40	0.220	1
10146	Zirconium	7440-67-7	1.99	J	5.50	0.924	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.440	U	0.440	0.110	2
06142	Silver	7440-22-4	0.0341	J	0.220	0.0286	2
06144	Strontium	7440-24-6	23.0		0.440	0.0748	2
06145	Thallium	7440-28-0	0.253		0.220	0.0330	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	U	0.0184	0.0111	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.02		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	10.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	2.24	U	2.24	0.176	1
11031	12378-PeCDD	40321-76-4	0.164	JBQ	11.2	0.0824	1
11031	123478-HxCDD	39227-28-6	0.106	JBQ	11.2	0.0502	1
11031	123678-HxCDD	57653-85-7	0.335	JBQ	11.2	0.0493	1
11031	123789-HxCDD	19408-74-3	0.490	JB	11.2	0.0461	1
11031	1234678-HpCDD	35822-46-9	1.06	JB	11.2	0.0568	1
11031	OCDD	3268-87-9	7.55	JB	22.4	0.0392	1
11031	2378-TCDF	51207-31-9	2.24	U	2.24	0.154	1
11031	12378-PeCDF	57117-41-6	0.241	JBQ	11.2	0.0520	1
11031	23478-PeCDF	57117-31-4	0.119	JBQ	11.2	0.0469	1
11031	123478-HxCDF	70648-26-9	0.0944	JBQ	11.2	0.0360	1
11031	123678-HxCDF	57117-44-9	0.129	JBQ	11.2	0.0358	1
11031	123789-HxCDF	72918-21-9	0.485	JB	11.2	0.0310	1
11031	234678-HxCDF	60851-34-5	0.101	JB	11.2	0.0337	1
11031	1234678-HpCDF	67562-39-4	0.255	JBQ	11.2	0.0211	1
11031	1234789-HpCDF	55673-89-7	0.150	JBQ	11.2	0.0242	1
11031	OCDF	39001-02-0	0.789	JB	22.4	0.0561	1
Reporting limits were raised due to interference from the sample matrix.							
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.121				1
Reporting limits were raised due to interference from the sample matrix.							

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	95	23 - 140
13C12-OCDD	106	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	97	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	95	26 - 138
13C12-OCDF	102	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	12a Volatile Organics EPA8260B	SW-846 8260B	1	B133252AA	11/22/2013 02:16	Sara E Johnson	0.89
10326	13a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133291AA	11/25/2013 18:51	Jason M Long	22.12
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	3	201332433189	11/20/2013 17:20	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201332433189	11/20/2013 17:09	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	2	201332433189	11/20/2013 17:10	Mitchell R Washel	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	3	201332433189	11/20/2013 17:10	Mitchell R Washel	n.a.
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 08:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 00:05	Laura M Krieger	22.6
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332433189	11/20/2013 17:09	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332433189	11/20/2013 17:09	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 06:57	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 21:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 15:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-10.0-11.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284467
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 09:17

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51810 SDG#: PH132-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:21	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:22	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:22	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:01	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:01	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 12:58	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	21	U	21	6.8	1
12969	Di-n-butylphthalate	84-74-2	21	U	21	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	21	U	21	6.8	1
12969	Dimethylphthalate	131-11-3	21	U	21	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	U	21	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	21	U	21	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.58
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	38	U	38	11	1
13099	Aroclor 5442	12642-23-8	38	U	38	11	1
13099	Aroclor 5460	11126-42-4	38	U	38	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.8	1
13099	PCB-1221	11104-28-2	19	U	19	5.8	1
13099	PCB-1232	11141-16-5	19	U	19	4.7	1
13099	PCB-1242	53469-21-9	19	U	19	4.7	1
13099	PCB-1248	12672-29-6	19	U	19	3.8	1
13099	PCB-1254	11097-69-1	19	U	19	5.0	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.8	1
13099	PCB-1268	11100-14-4	19	U	19	3.8	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.6	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,600		44.7	8.06	1
06944	Antimony	7440-36-0	4.47	U	4.47	0.827	1
06935	Arsenic	7440-38-2	6.53		4.47	0.783	1
06946	Barium	7440-39-3	59.9		1.12	0.0369	1
06947	Beryllium	7440-41-7	0.570	J	1.12	0.0749	1
07914	Boron	7440-42-8	2.53	J	11.2	0.939	1
06949	Cadmium	7440-43-9	0.110	J	1.12	0.0850	1
01650	Calcium	7440-70-2	1,940		22.4	3.73	1
06951	Chromium	7440-47-3	15.4		3.35	0.179	1
06952	Cobalt	7440-48-4	2.68		1.12	0.111	1
06953	Copper	7440-50-8	4.37		2.24	0.324	1
01654	Iron	7439-89-6	20,600		44.7	4.05	1
06955	Lead	7439-92-1	6.04		3.35	0.559	1
01656	Lithium	7439-93-2	16.7		4.5	0.38	1
01657	Magnesium	7439-95-4	3,650		11.2	1.87	1
06958	Manganese	7439-96-5	130		1.12	0.0928	1
06960	Molybdenum	7439-98-7	0.278	J	2.24	0.190	1
06961	Nickel	7440-02-0	3.73		2.24	0.145	1
10145	Phosphorus	7723-14-0	119		11.2	3.23	1
01662	Potassium	7440-09-7	1,420		112	9.32	1
01667	Sodium	7440-23-5	134		112	18.7	1
06969	Tin	7440-31-5	2.90	J	11.2	0.246	1
06970	Titanium	7440-32-6	1,030		1.12	0.190	1
06971	Vanadium	7440-62-2	41.3		1.12	0.145	1
06972	Zinc	7440-66-6	33.8		4.47	0.224	1
10146	Zirconium	7440-67-7	5.59	U	5.59	0.939	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.447	U	0.447	0.112	2
06142	Silver	7440-22-4	0.224	U	0.224	0.0291	2
06144	Strontium	7440-24-6	19.3		0.447	0.0760	2
06145	Thallium	7440-28-0	0.229		0.224	0.0335	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0184	J	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.4 C.	n.a.	6.48		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	12.3		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.13 U	1.13	0.0750	1
11031	12378-PeCDD	40321-76-4	0.0376 JBQ	5.64	0.0375	1
11031	123478-HxCDD	39227-28-6	0.0375 JBQ	5.64	0.0220	1
11031	123678-HxCDD	57653-85-7	0.0828 JBQ	5.64	0.0221	1
11031	123789-HxCDD	19408-74-3	0.0396 JB	5.64	0.0200	1
11031	1234678-HpCDD	35822-46-9	0.108 JBQ	5.64	0.0194	1
11031	OCDD	3268-87-9	0.499 JBQ	11.3	0.0186	1
11031	2378-TCDF	51207-31-9	1.13 U	1.13	0.0562	1
11031	12378-PeCDF	57117-41-6	0.0498 JB	5.64	0.0251	1
11031	23478-PeCDF	57117-31-4	0.0295 JBQ	5.64	0.0220	1
11031	123478-HxCDF	70648-26-9	0.0291 JBQ	5.64	0.0137	1
11031	123678-HxCDF	57117-44-9	0.0255 JBQ	5.64	0.0135	1
11031	123789-HxCDF	72918-21-9	0.0372 JBQ	5.64	0.0128	1
11031	234678-HxCDF	60851-34-5	0.0321 JBQ	5.64	0.0127	1
11031	1234678-HpCDF	67562-39-4	0.0538 JBQ	5.64	0.00741	1
11031	1234789-HpCDF	55673-89-7	0.0306 JB	5.64	0.00867	1
11031	OCDF	39001-02-0	0.178 JB	11.3	0.0222	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00582			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	101	23 - 140
13C12-OCDD	113	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	108	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 08:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 00:43	Laura M Krieger	23.58
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332433189	11/20/2013 17:12	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332433189	11/20/2013 17:12	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 07:15	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 18:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 16:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:25	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-518-SA5A-SB-15.0-16.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284468
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 10:03

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51815 SDG#: PH132-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:24	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:24	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:04	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:04	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:00	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	0.80	J	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	2.6		1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	0.99	J	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	0.89	J	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	0.72	J	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,900		41.3	7.45	1
06944	Antimony	7440-36-0	4.13	U	4.13	0.764	1
06935	Arsenic	7440-38-2	3.95	J	4.13	0.723	1
06946	Barium	7440-39-3	91.8		1.03	0.0341	1
06947	Beryllium	7440-41-7	0.491	J	1.03	0.0692	1
07914	Boron	7440-42-8	3.77	J	10.3	0.868	1
06949	Cadmium	7440-43-9	0.239	J	1.03	0.0785	1
01650	Calcium	7440-70-2	2,370		20.7	3.45	1
06951	Chromium	7440-47-3	19.7		3.10	0.165	1
06952	Cobalt	7440-48-4	4.88		1.03	0.102	1
06953	Copper	7440-50-8	8.64		2.07	0.300	1
01654	Iron	7439-89-6	18,400		41.3	3.74	1
06955	Lead	7439-92-1	6.62		3.10	0.517	1
01656	Lithium	7439-93-2	20.3		4.1	0.35	1
01657	Magnesium	7439-95-4	3,630		10.3	1.73	1
06958	Manganese	7439-96-5	271		1.03	0.0857	1
06960	Molybdenum	7439-98-7	0.284	J	2.07	0.176	1
06961	Nickel	7440-02-0	7.71		2.07	0.134	1
10145	Phosphorus	7723-14-0	307		10.3	2.99	1
01662	Potassium	7440-09-7	2,930		103	8.62	1
01667	Sodium	7440-23-5	79.0	J	103	17.3	1
06969	Tin	7440-31-5	2.79	J	10.3	0.227	1
06970	Titanium	7440-32-6	1,060		1.03	0.176	1
06971	Vanadium	7440-62-2	30.9		1.03	0.134	1
06972	Zinc	7440-66-6	54.6		4.13	0.207	1
10146	Zirconium	7440-67-7	1.88	J	5.17	0.868	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.413	U	0.413	0.103	2
06142	Silver	7440-22-4	0.0358	J	0.207	0.0269	2
06144	Strontium	7440-24-6	17.5		0.413	0.0702	2
06145	Thallium	7440-28-0	0.248		0.207	0.0310	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	J	0.0171	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.31	J	0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.32		0.0100	0.0100	1
	The pH was measured in water at 19.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.05	U	1.05	0.0687	1
11031	12378-PeCDD	40321-76-4	0.172	JB	5.26	0.0440	1
11031	123478-HxCDD	39227-28-6	0.124	JB	5.26	0.0392	1
11031	123678-HxCDD	57653-85-7	0.680	JBQ	5.26	0.0420	1
11031	123789-HxCDD	19408-74-3	0.559	JB	5.26	0.0372	1
11031	1234678-HpCDD	35822-46-9	16.6	B	5.26	0.0484	1
11031	OCDD	3268-87-9	243	B	10.5	0.0311	1
11031	2378-TCDF	51207-31-9	1.05	U	1.05	0.0593	1
11031	12378-PeCDF	57117-41-6	0.300	JB	5.26	0.0300	1
11031	23478-PeCDF	57117-31-4	0.109	JBQ	5.26	0.0279	1
11031	123478-HxCDF	70648-26-9	0.202	JBQ	5.26	0.0300	1
11031	123678-HxCDF	57117-44-9	0.146	JBQ	5.26	0.0294	1
11031	123789-HxCDF	72918-21-9	0.422	JB	5.26	0.0282	1
11031	234678-HxCDF	60851-34-5	0.185	JBQ	5.26	0.0274	1
11031	1234678-HpCDF	67562-39-4	2.26	JB	5.26	0.0149	1
11031	1234789-HpCDF	55673-89-7	0.256	JBQ	5.26	0.0166	1
11031	OCDF	39001-02-0	4.44	JB	10.5	0.0242	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.554				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	112	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	90	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	94	26 - 138
13C12-OCDF	108	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/06/2013 02:07	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 07:34	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 18:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 17:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:28	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:27	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:27	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:06	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:06	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284469
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:35

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59600 SDG#: PH132-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:02	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13330243201A	11/27/2013 21:41	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.5	J	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	0.96	J	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	3.3		1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	2.3		1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.4	J	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	0.75	J	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	19		1.8	0.72	1
12969	Pyrene	129-00-0	3.2		1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.6	J	1.0	0.2	23.11
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.5	1
13099	PCB-1242	53469-21-9	18	U	18	4.5	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	15		5.4	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	45		5.4	2.2	1
12952	EFH (C30-C40)	n.a.	59		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		42.6	7.68	1
06944	Antimony	7440-36-0	4.26	U	4.26	0.789	1
06935	Arsenic	7440-38-2	10.7		4.26	0.746	1
06946	Barium	7440-39-3	129		1.07	0.0352	1
06947	Beryllium	7440-41-7	0.987	J	1.07	0.0714	1
07914	Boron	7440-42-8	3.80	J	10.7	0.895	1
06949	Cadmium	7440-43-9	0.226	J	1.07	0.0810	1
01650	Calcium	7440-70-2	4,460		21.3	3.56	1
06951	Chromium	7440-47-3	31.0		3.20	0.171	1
06952	Cobalt	7440-48-4	7.85		1.07	0.105	1
06953	Copper	7440-50-8	17.2		2.13	0.309	1
01654	Iron	7439-89-6	31,800		85.3	7.72	2
06955	Lead	7439-92-1	9.89		3.20	0.533	1
01656	Lithium	7439-93-2	29.3		4.3	0.36	1
01657	Magnesium	7439-95-4	6,440		10.7	1.78	1
06958	Manganese	7439-96-5	337		1.07	0.0884	1
06960	Molybdenum	7439-98-7	0.218	J	2.13	0.181	1
06961	Nickel	7440-02-0	15.2		2.13	0.139	1
10145	Phosphorus	7723-14-0	297		10.7	3.08	1
01662	Potassium	7440-09-7	1,960		107	8.89	1
01667	Sodium	7440-23-5	133		107	17.8	1
06969	Tin	7440-31-5	3.42	J	10.7	0.234	1
06970	Titanium	7440-32-6	1,220		1.07	0.181	1
06971	Vanadium	7440-62-2	53.2		1.07	0.139	1
06972	Zinc	7440-66-6	68.8		4.26	0.213	1
10146	Zirconium	7440-67-7	5.33	U	5.33	0.895	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.124	J	0.426	0.107	2
06142	Silver	7440-22-4	0.0528	J	0.213	0.0277	2
06144	Strontium	7440-24-6	28.2		0.426	0.0725	2
06145	Thallium	7440-28-0	0.264		0.213	0.0320	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0209		0.0178	0.0107	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.43	U	0.43	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	6.27		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	8.0	0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0803	1
11031	12378-PeCDD	40321-76-4	0.228	JBQ	5.40	0.0437	1
11031	123478-HxCDD	39227-28-6	0.0587	JBQ	5.40	0.0311	1
11031	123678-HxCDD	57653-85-7	0.125	JBQ	5.40	0.0326	1
11031	123789-HxCDD	19408-74-3	0.164	JBQ	5.40	0.0298	1
11031	1234678-HpCDD	35822-46-9	0.675	JBQ	5.40	0.0413	1
11031	OCDD	3268-87-9	5.02	JB	10.8	0.0257	1
11031	2378-TCDF	51207-31-9	0.0935	JQ	1.08	0.0622	1
11031	12378-PeCDF	57117-41-6	0.233	JBQ	5.40	0.0273	1
11031	23478-PeCDF	57117-31-4	0.144	JBQ	5.40	0.0247	1
11031	123478-HxCDF	70648-26-9	0.101	JBQ	5.40	0.0246	1
11031	123678-HxCDF	57117-44-9	0.156	JB	5.40	0.0250	1
11031	123789-HxCDF	72918-21-9	0.112	JBQ	5.40	0.0265	1
11031	234678-HxCDF	60851-34-5	0.131	JB	5.40	0.0242	1
11031	1234678-HpCDF	67562-39-4	0.146	JB	5.40	0.0182	1
11031	1234789-HpCDF	55673-89-7	0.133	JBQ	5.40	0.0209	1
11031	OCDF	39001-02-0	0.267	JBQ	10.8	0.0438	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0317				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/06/2013 02:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 01:21	Laura M Krieger	23.11
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332433189	11/20/2013 17:13	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332433189	11/20/2013 17:13	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 07:52	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 21:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/07/2013 21:22	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 17:43	Katlin N Cataldi	2
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:32	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-596-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284470
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 11:43

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

59645 SDG#: PH132-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:29	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:29	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:08	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:08	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:04	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13330243201A	11/27/2013 21:48	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13330243201A	11/26/2013 15:50	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.1	J	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.2	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.2	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.34	1
10590	p,p-DDE	72-55-9	8.0		1.8	0.34	1
10590	p,p-DDT	50-29-3	11		1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	3.3	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	9.0	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		41.2	7.42	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	4.91		4.12	0.720	1
06946	Barium	7440-39-3	99.4		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.634	J	1.03	0.0690	1
07914	Boron	7440-42-8	4.43	J	10.3	0.865	1
06949	Cadmium	7440-43-9	0.308	J	1.03	0.0782	1
01650	Calcium	7440-70-2	1,910		20.6	3.44	1
06951	Chromium	7440-47-3	19.2		3.09	0.165	1
06952	Cobalt	7440-48-4	5.65		1.03	0.102	1
06953	Copper	7440-50-8	8.45		2.06	0.298	1
01654	Iron	7439-89-6	20,200		41.2	3.73	1
06955	Lead	7439-92-1	7.05		3.09	0.515	1
01656	Lithium	7439-93-2	19.9		4.1	0.35	1
01657	Magnesium	7439-95-4	3,950		10.3	1.72	1
06958	Manganese	7439-96-5	311		1.03	0.0854	1
06960	Molybdenum	7439-98-7	0.621	J	2.06	0.175	1
06961	Nickel	7440-02-0	8.91		2.06	0.134	1
10145	Phosphorus	7723-14-0	229		10.3	2.97	1
01662	Potassium	7440-09-7	2,750		103	8.58	1
01667	Sodium	7440-23-5	71.2	J	103	17.2	1
06969	Tin	7440-31-5	2.74	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,110		1.03	0.175	1
06971	Vanadium	7440-62-2	36.5		1.03	0.134	1
06972	Zinc	7440-66-6	51.6		4.12	0.206	1
10146	Zirconium	7440-67-7	1.98	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.412 U	0.412	0.103	2
06142	Silver	7440-22-4	0.104 J	0.206	0.0268	2
06144	Strontium	7440-24-6	18.6	0.412	0.0700	2
06145	Thallium	7440-28-0	0.280	0.206	0.0309	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0113 J	0.0162	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	6.81	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	3.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.142	J	1.01	0.0699	1
11031	12378-PeCDD	40321-76-4	0.159	JBQ	5.07	0.0398	1
11031	123478-HxCDD	39227-28-6	0.130	JBQ	5.07	0.0324	1
11031	123678-HxCDD	57653-85-7	0.280	JBQ	5.07	0.0339	1
11031	123789-HxCDD	19408-74-3	0.346	JB	5.07	0.0314	1
11031	1234678-HpCDD	35822-46-9	3.31	JB	5.07	0.0395	1
11031	OCDD	3268-87-9	34.9	B	10.1	0.0268	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0564	1
11031	12378-PeCDF	57117-41-6	0.248	JBQ	5.07	0.0256	1
11031	23478-PeCDF	57117-31-4	0.162	JB	5.07	0.0226	1
11031	123478-HxCDF	70648-26-9	0.158	JBQ	5.07	0.0257	1
11031	123678-HxCDF	57117-44-9	0.149	JB	5.07	0.0247	1
11031	123789-HxCDF	72918-21-9	0.161	JB	5.07	0.0263	1
11031	234678-HxCDF	60851-34-5	0.153	JB	5.07	0.0241	1
11031	1234678-HpCDF	67562-39-4	0.903	JB	5.07	0.0156	1
11031	1234789-HpCDF	55673-89-7	0.153	JBQ	5.07	0.0188	1
11031	OCDF	39001-02-0	1.67	JB	10.1	0.0328	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.325				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	55	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	77	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/04/2013 23:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 02:39	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 08:11	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133270022A	11/24/2013 22:40	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 19:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/07/2013 22:19	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 09:43	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284471
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 18:58	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 18:58	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:38	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:38	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:06	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.7	0.69	1
12969	Acenaphthylene	208-96-8	31		1.7	0.34	1
12969	Anthracene	120-12-7	33		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	34		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	49		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	30		18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	21		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	36		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	37		19	6.2	1
12969	Di-n-butylphthalate	84-74-2	33		19	6.2	1
12969	Chrysene	218-01-9	36		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	24		1.7	0.69	1
12969	Diethylphthalate	84-66-2	34		19	6.2	1
12969	Dimethylphthalate	131-11-3	32		19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	40		19	6.2	1
12969	Fluoranthene	206-44-0	29		1.7	0.69	1
12969	Fluorene	86-73-7	33		1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	23		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.69	1
12969	Naphthalene	91-20-3	33		1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	33		1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	37		19	6.2	1
12969	Phenanthrene	85-01-8	33		1.7	0.69	1
12969	Pyrene	129-00-0	40		1.7	0.69	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.4		0.86	0.18	1
10590	Alpha BHC	319-84-6	3.4		0.86	0.18	1
10590	Beta BHC	319-85-7	3.7		2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	3.4		0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	9.8		1.8	0.34	1
10590	p,p-DDE	72-55-9	140		1.8	0.34	1
10590	p,p-DDT	50-29-3	140		1.8	0.36	1
10590	Delta BHC	319-86-8	3.7		0.86	0.47	1
10590	Dieldrin	60-57-1	10		1.8	0.34	1
10590	Endosulfan I	959-98-8	3.4		0.86	0.23	1
10590	Endosulfan II	33213-65-9	7.1		1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.0		1.8	0.34	1
10590	Endrin	72-20-8	7.6		1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	7.8		1.8	0.34	1
10590	Endrin Ketone	53494-70-5	6.5		1.9	0.62	1
10590	Heptachlor	76-44-8	3.4		0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.8		0.86	0.18	1
10590	Methoxychlor	72-43-5	36		6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	130		18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	130		18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.8		5.2	2.1	1
12952	EFH (C15-C20)	n.a.	11		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	56		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	150		10	4.2	1
12952	EFH (C8-C11)	n.a.	4.9	J	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,000		41.2	7.42	1
06944	Antimony	7440-36-0	30.6		4.12	0.762	1
06935	Arsenic	7440-38-2	20.0		4.12	0.720	1
06946	Barium	7440-39-3	303		1.03	0.0340	1
06947	Beryllium	7440-41-7	5.75		1.03	0.0690	1
07914	Boron	7440-42-8	208		10.3	0.865	1
06949	Cadmium	7440-43-9	5.36		1.03	0.0782	1
01650	Calcium	7440-70-2	2,370		20.6	3.44	1
06951	Chromium	7440-47-3	41.8		3.09	0.165	1
06952	Cobalt	7440-48-4	56.0		1.03	0.102	1
06953	Copper	7440-50-8	35.5		2.06	0.298	1
01654	Iron	7439-89-6	20,100		41.2	3.73	1
06955	Lead	7439-92-1	24.9		3.09	0.515	1
01656	Lithium	7439-93-2	125		4.1	0.35	1
01657	Magnesium	7439-95-4	4,150		10.3	1.72	1
06958	Manganese	7439-96-5	365		1.03	0.0854	1
06960	Molybdenum	7439-98-7	205		2.06	0.175	1
06961	Nickel	7440-02-0	59.8		2.06	0.134	1
10145	Phosphorus	7723-14-0	326		10.3	2.97	1
01662	Potassium	7440-09-7	3,770		103	8.58	1
01667	Sodium	7440-23-5	1,070		103	17.2	1
06969	Tin	7440-31-5	376		10.3	0.226	1
06970	Titanium	7440-32-6	1,260		1.03	0.175	1
06971	Vanadium	7440-62-2	89.9		1.03	0.134	1
06972	Zinc	7440-66-6	103		4.12	0.206	1
10146	Zirconium	7440-67-7	102		5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6020A**		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.82	0.412	0.103	2
06142	Silver	7440-22-4	10.4	0.206	0.0268	2
06144	Strontium	7440-24-6	26.3	0.412	0.0700	2
06145	Thallium	7440-28-0	0.656	0.206	0.0309	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.193	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.7		1.01	0.0674	1
11031	12378-PeCDD	40321-76-4	104	B	5.07	0.0623	1
11031	123478-HxCDD	39227-28-6	106	B	5.07	0.0749	1
11031	123678-HxCDD	57653-85-7	117	B	5.07	0.0736	1
11031	123789-HxCDD	19408-74-3	106	B	5.07	0.0673	1
11031	1234678-HpCDD	35822-46-9	220	B	5.07	0.101	1
11031	OCDD	3268-87-9	1,620	B	10.1	0.0758	1
11031	2378-TCDF	51207-31-9	20.7		1.01	0.120	1
11031	12378-PeCDF	57117-41-6	107	B	5.07	0.0563	1
11031	23478-PeCDF	57117-31-4	106	B	5.07	0.0512	1
11031	123478-HxCDF	70648-26-9	107	B	5.07	0.0700	1
11031	123678-HxCDF	57117-44-9	107	B	5.07	0.0694	1
11031	123789-HxCDF	72918-21-9	106	B	5.07	0.0670	1
11031	234678-HxCDF	60851-34-5	108	B	5.07	0.0690	1
11031	1234678-HpCDF	67562-39-4	131	B	5.07	0.0497	1
11031	1234789-HpCDF	55673-89-7	108	B	5.07	0.0541	1
11031	OCDF	39001-02-0	297	B	10.1	0.0416	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	95	28 - 130
13C12-1234678-HpCDD	100	23 - 140
13C12-OCDD	119	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	98	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	114	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 06:20	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 02:55	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 08:29	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133270022A	11/24/2013 22:40	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 22:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/06/2013 20:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 09:54	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284472
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:05	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:05	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:45	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:45	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:16	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.7	0.68	1
12969	Acenaphthylene	208-96-8	32		1.7	0.34	1
12969	Anthracene	120-12-7	34		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	35		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	34		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	52		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	32		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	21		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	120		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	51		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	35		18	6.1	1
12969	Chrysene	218-01-9	37		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	25		1.7	0.68	1
12969	Diethylphthalate	84-66-2	33		18	6.1	1
12969	Dimethylphthalate	131-11-3	31		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	48		18	6.1	1
12969	Fluoranthene	206-44-0	31		1.7	0.68	1
12969	Fluorene	86-73-7	32		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	24		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.68	1
12969	Naphthalene	91-20-3	33		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	26		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	40		18	6.1	1
12969	Phenanthrene	85-01-8	36		1.7	0.68	1
12969	Pyrene	129-00-0	38		1.7	0.68	1
	The recovery for the sample internal standard(s) is outside the QC acceptance limits. The recovery for the internal standard(s) is again low but within QC limits in the associated matrix spike(s), indicating a matrix effect.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	3.3		0.85	0.17	1
10590	Alpha BHC	319-84-6	3.2		0.85	0.17	1
10590	Beta BHC	319-85-7	3.6		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.3		0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	8.2		1.7	0.34	1
10590	p,p-DDE	72-55-9	120		1.7	0.34	1
10590	p,p-DDT	50-29-3	59		1.7	0.36	1
10590	Delta BHC	319-86-8	3.5		0.85	0.46	1
10590	Dieldrin	60-57-1	8.7		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.1		0.85	0.23	1
10590	Endosulfan II	33213-65-9	4.3		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.0		1.7	0.34	1
10590	Endrin	72-20-8	7.1		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	5.3		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	6.4		1.8	0.62	1
10590	Heptachlor	76-44-8	3.3		0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.6		0.85	0.17	1
10590	Methoxychlor	72-43-5	35		6.9	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	150		18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	160		18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2		5.2	2.1	1
12952	EFH (C15-C20)	n.a.	10		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	33		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	57		10	4.2	1
12952	EFH (C8-C11)	n.a.	4.5	J	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,400		41.2	7.42	1
06944	Antimony	7440-36-0	31.1		4.12	0.762	1
06935	Arsenic	7440-38-2	20.3		4.12	0.720	1
06946	Barium	7440-39-3	301		1.03	0.0340	1
06947	Beryllium	7440-41-7	5.73		1.03	0.0690	1
07914	Boron	7440-42-8	207		10.3	0.865	1
06949	Cadmium	7440-43-9	5.30		1.03	0.0782	1
01650	Calcium	7440-70-2	2,430		20.6	3.44	1
06951	Chromium	7440-47-3	41.4		3.09	0.165	1
06952	Cobalt	7440-48-4	55.3		1.03	0.102	1
06953	Copper	7440-50-8	35.4		2.06	0.298	1
01654	Iron	7439-89-6	20,600		41.2	3.73	1
06955	Lead	7439-92-1	22.8		3.09	0.515	1
01656	Lithium	7439-93-2	126		4.1	0.35	1
01657	Magnesium	7439-95-4	4,180		10.3	1.72	1
06958	Manganese	7439-96-5	335		1.03	0.0854	1
06960	Molybdenum	7439-98-7	203		2.06	0.175	1
06961	Nickel	7440-02-0	59.5		2.06	0.134	1
10145	Phosphorus	7723-14-0	332		10.3	2.97	1
01662	Potassium	7440-09-7	3,740		103	8.58	1
01667	Sodium	7440-23-5	1,070		103	17.2	1
06969	Tin	7440-31-5	373		10.3	0.226	1
06970	Titanium	7440-32-6	1,290		1.03	0.175	1
06971	Vanadium	7440-62-2	88.9		1.03	0.134	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	103	4.12	0.206	1
10146	Zirconium	7440-67-7	101	5.15	0.865	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	1.80	0.412	0.103	2
06142	Silver	7440-22-4	10.6	0.206	0.0268	2
06144	Strontium	7440-24-6	29.4	0.412	0.0700	2
06145	Thallium	7440-28-0	0.698	0.206	0.0309	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.188	0.0169	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.8	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	19.3		1.03	0.0587	1
11031	12378-PeCDD	40321-76-4	98.7	B	5.13	0.0574	1
11031	123478-HxCDD	39227-28-6	105	B	5.13	0.0598	1
11031	123678-HxCDD	57653-85-7	106	B	5.13	0.0633	1
11031	123789-HxCDD	19408-74-3	104	B	5.13	0.0594	1
11031	1234678-HpCDD	35822-46-9	150	B	5.13	0.0903	1
11031	OCDD	3268-87-9	767	B	10.3	0.0783	1
11031	2378-TCDF	51207-31-9	21.0		1.03	0.111	1
11031	12378-PeCDF	57117-41-6	107	B	5.13	0.0603	1
11031	23478-PeCDF	57117-31-4	107	B	5.13	0.0573	1
11031	123478-HxCDF	70648-26-9	107	B	5.13	0.0577	1
11031	123678-HxCDF	57117-44-9	107	B	5.13	0.0560	1
11031	123789-HxCDF	72918-21-9	108	B	5.13	0.0583	1
11031	234678-HxCDF	60851-34-5	107	B	5.13	0.0543	1
11031	1234678-HpCDF	67562-39-4	118	B	5.13	0.0472	1
11031	1234789-HpCDF	55673-89-7	108	B	5.13	0.0581	1
11031	OCDF	39001-02-0	248	B	10.3	0.0606	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	59	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 06:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 03:10	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 08:48	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133270022A	11/24/2013 22:40	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 21:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/10/2013 11:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 09:58	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284473
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:07	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:07	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:47	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:47	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284474
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		41.2	7.42	1
06944	Antimony	7440-36-0	4.12	U	4.12	0.762	1
06935	Arsenic	7440-38-2	4.71		4.12	0.720	1
06946	Barium	7440-39-3	91.0		1.03	0.0340	1
06947	Beryllium	7440-41-7	0.591	J	1.03	0.0690	1
07914	Boron	7440-42-8	4.17	J	10.3	0.865	1
06949	Cadmium	7440-43-9	0.267	J	1.03	0.0782	1
01650	Calcium	7440-70-2	1,800		20.6	3.44	1
06951	Chromium	7440-47-3	18.2		3.09	0.165	1
06952	Cobalt	7440-48-4	4.98		1.03	0.102	1
06953	Copper	7440-50-8	7.86		2.06	0.298	1
01654	Iron	7439-89-6	18,800		41.2	3.73	1
06955	Lead	7439-92-1	6.50		3.09	0.515	1
01656	Lithium	7439-93-2	18.6		4.1	0.35	1
01657	Magnesium	7439-95-4	3,650		10.3	1.72	1
06958	Manganese	7439-96-5	266		1.03	0.0854	1
06960	Molybdenum	7439-98-7	0.425	J	2.06	0.175	1
06961	Nickel	7440-02-0	8.38		2.06	0.134	1
10145	Phosphorus	7723-14-0	210		10.3	2.97	1
01662	Potassium	7440-09-7	2,420		103	8.58	1
01667	Sodium	7440-23-5	68.4	J	103	17.2	1
06969	Tin	7440-31-5	2.56	J	10.3	0.226	1
06970	Titanium	7440-32-6	1,010		1.03	0.175	1
06971	Vanadium	7440-62-2	34.1		1.03	0.134	1
06972	Zinc	7440-66-6	47.2		4.12	0.206	1
10146	Zirconium	7440-67-7	2.66	J	5.15	0.865	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.412	U	0.412	0.103	2
06142	Silver	7440-22-4	0.130	J	0.206	0.0268	2
06144	Strontium	7440-24-6	16.8		0.412	0.0700	2
06145	Thallium	7440-28-0	0.243		0.206	0.0309	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0130	J	0.0169	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.84		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	3.8		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284474
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:15

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70800 SDG#: PH132-08DUP

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 09:51	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:03	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:03	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 13:43	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 13:43	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:14	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.49	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	0.72	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	0.91	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	31		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.1	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.0		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.2		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.9		1.7	0.68	1
12969	Pyrene	129-00-0	2.3		1.7	0.68	1
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.1	J	1.7	0.33	1
10590	p,p-DDE	72-55-9	87		34	6.6	20
10590	p,p-DDT	50-29-3	52		34	7.1	20
10590	Delta BHC	319-86-8	0.84	U	0.84	0.45	1
10590	Dieldrin	60-57-1	1.5	J	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	0.46	J	1.7	0.33	1
10590	Endrin	72-20-8	6.2	U	6.2	6.2	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.60	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.28	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.91	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Toxaphene	8001-35-2	33	U	33	14	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	16	J	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	4.2	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	9.4	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,400		40.2	7.24	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.743	1
06935	Arsenic	7440-38-2	2.99	J	4.02	0.703	1
06946	Barium	7440-39-3	95.6		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.409	J	1.00	0.0673	1
07914	Boron	7440-42-8	4.22	J	10.0	0.843	1
06949	Cadmium	7440-43-9	0.495	J	1.00	0.0763	1
01650	Calcium	7440-70-2	2,720		20.1	3.35	1
06951	Chromium	7440-47-3	16.5		3.01	0.161	1
06952	Cobalt	7440-48-4	4.35		1.00	0.0994	1
06953	Copper	7440-50-8	9.48		2.01	0.291	1
01654	Iron	7439-89-6	15,700		40.2	3.64	1
06955	Lead	7439-92-1	17.6		3.01	0.502	1
01656	Lithium	7439-93-2	14.8		4.0	0.34	1
01657	Magnesium	7439-95-4	3,370		10.0	1.68	1
06958	Manganese	7439-96-5	255		1.00	0.0833	1
06960	Molybdenum	7439-98-7	0.348	J	2.01	0.171	1
06961	Nickel	7440-02-0	7.60		2.01	0.131	1
10145	Phosphorus	7723-14-0	363		10.0	2.90	1
01662	Potassium	7440-09-7	3,090		100	8.37	1
01667	Sodium	7440-23-5	61.6	J	100	16.8	1
06969	Tin	7440-31-5	2.51	J	10.0	0.221	1
06970	Titanium	7440-32-6	860		1.00	0.171	1
06971	Vanadium	7440-62-2	28.0		1.00	0.131	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06972	Zinc	7440-66-6	82.9		4.02	0.201	1
10146	Zirconium	7440-67-7	1.35	J	5.02	0.843	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.152	J	0.402	0.100	2
06142	Silver	7440-22-4	1.38		0.201	0.0261	2
06144	Strontium	7440-24-6	22.2		0.402	0.0683	2
06145	Thallium	7440-28-0	0.221		0.201	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0441		0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.75		0.0100	0.0100	1
	The pH was measured in water at 20.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.16	Q	1.01	0.0626	1
11031	12378-PeCDD	40321-76-4	0.602	JBQ	5.05	0.0576	1
11031	123478-HxCDD	39227-28-6	0.859	JB	5.05	0.0455	1
11031	123678-HxCDD	57653-85-7	3.23	JB	5.05	0.0458	1
11031	123789-HxCDD	19408-74-3	1.78	JB	5.05	0.0422	1
11031	1234678-HpCDD	35822-46-9	80.9	B	5.05	0.0820	1
11031	OCDD	3268-87-9	1,140	B	10.1	0.0711	1
11031	2378-TCDF	51207-31-9	0.462	J	1.01	0.0962	1
11031	12378-PeCDF	57117-41-6	1.94	JB	5.05	0.0468	1
11031	23478-PeCDF	57117-31-4	0.920	JB	5.05	0.0450	1
11031	123478-HxCDF	70648-26-9	0.991	JB	5.05	0.0446	1
11031	123678-HxCDF	57117-44-9	1.05	JB	5.05	0.0447	1
11031	123789-HxCDF	72918-21-9	0.448	JBQ	5.05	0.0451	1
11031	234678-HxCDF	60851-34-5	1.33	JB	5.05	0.0442	1
11031	1234678-HpCDF	67562-39-4	18.6	B	5.05	0.0270	1
11031	1234789-HpCDF	55673-89-7	2.53	JB	5.05	0.0312	1
11031	OCDF	39001-02-0	44.9	B	10.1	0.0491	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.68				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	60	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	57	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/06/2013 03:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 03:25	Jamie L Brillhart	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 04:11	Jamie L Brillhart	20
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 09:06	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133270022A	11/24/2013 22:40	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 20:07	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/07/2013 23:16	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1008-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284475
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:10

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10080 SDG#: PH132-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:36	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:31	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:31	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:11	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:11	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:21	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	13	U	13	2.6	309.41
	Reporting limits were raised due to sample foaming.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,200		42.4	7.65	1
06944	Antimony	7440-36-0	4.24	U	4.24	0.785	1
06935	Arsenic	7440-38-2	5.08		4.24	0.742	1
06946	Barium	7440-39-3	102		1.06	0.0350	1
06947	Beryllium	7440-41-7	0.725	J	1.06	0.0710	1
07914	Boron	7440-42-8	3.78	J	10.6	0.891	1
06949	Cadmium	7440-43-9	0.136	J	1.06	0.0806	1
01650	Calcium	7440-70-2	2,010		21.2	3.54	1
06951	Chromium	7440-47-3	21.1		3.18	0.170	1
06952	Cobalt	7440-48-4	4.45		1.06	0.105	1
06953	Copper	7440-50-8	6.35		2.12	0.308	1
01654	Iron	7439-89-6	21,700		42.4	3.84	1
06955	Lead	7439-92-1	6.71		3.18	0.530	1
01656	Lithium	7439-93-2	18.4		4.2	0.36	1
01657	Magnesium	7439-95-4	4,000		10.6	1.77	1
06958	Manganese	7439-96-5	241		1.06	0.0880	1
06960	Molybdenum	7439-98-7	0.401	J	2.12	0.180	1
06961	Nickel	7440-02-0	8.64		2.12	0.138	1
10145	Phosphorus	7723-14-0	161		10.6	3.06	1
01662	Potassium	7440-09-7	1,570		106	8.84	1
01667	Sodium	7440-23-5	136		106	17.7	1
06969	Tin	7440-31-5	3.03	J	10.6	0.233	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06970	Titanium	7440-32-6	1,130	1.06	0.180	1
06971	Vanadium	7440-62-2	40.2	1.06	0.138	1
06972	Zinc	7440-66-6	41.3	4.24	0.212	1
10146	Zirconium	7440-67-7	1.69 J	5.30	0.891	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.424 U	0.424	0.106	2
06142	Silver	7440-22-4	0.0521 J	0.212	0.0276	2
06144	Strontium	7440-24-6	21.7	0.424	0.0721	2
06145	Thallium	7440-28-0	0.224	0.212	0.0318	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0165 J	0.0173	0.0104	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.99	0.0100	0.0100	1
	The pH was measured in water at 19.7 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.05 U	1.05	0.0713	1
11031	12378-PeCDD	40321-76-4	0.0860 JBQ	5.27	0.0424	1
11031	123478-HxCDD	39227-28-6	5.27 U	5.27	0.0296	1
11031	123678-HxCDD	57653-85-7	5.27 U	5.27	0.0302	1
11031	123789-HxCDD	19408-74-3	0.0524 JBQ	5.27	0.0279	1
11031	1234678-HpCDD	35822-46-9	0.291 JB	5.27	0.0288	1
11031	OCDD	3268-87-9	1.39 JB	10.5	0.0248	1
11031	2378-TCDF	51207-31-9	0.0694 JQ	1.05	0.0625	1
11031	12378-PeCDF	57117-41-6	0.0677 JBQ	5.27	0.0245	1
11031	23478-PeCDF	57117-31-4	0.0654 JBQ	5.27	0.0222	1
11031	123478-HxCDF	70648-26-9	0.0748 JB	5.27	0.0242	1
11031	123678-HxCDF	57117-44-9	0.0630 JBQ	5.27	0.0242	1
11031	123789-HxCDF	72918-21-9	0.0672 JBQ	5.27	0.0246	1
11031	234678-HxCDF	60851-34-5	0.0425 JBQ	5.27	0.0241	1
11031	1234678-HpCDF	67562-39-4	0.0618 JBQ	5.27	0.0153	1
11031	1234789-HpCDF	55673-89-7	0.0391 JBQ	5.27	0.0179	1
11031	OCDF	39001-02-0	0.226 JB	10.5	0.0343	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0109			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	48	25 - 164
13C12-12378-PeCDD	52	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	43	24 - 169
13C12-12378-PeCDF	48	24 - 185
13C12-23478-PeCDF	51	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	73	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/06/2013 03:41	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329B16A	11/27/2013 08:43	Laura M Krieger	309.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332433189	11/20/2013 17:14	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332433189	11/20/2013 17:14	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133270022A	12/03/2013 04:26	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 10:38	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133270022A	11/24/2013 22:40	Karen L Beyer	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 19:24	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/08/2013 00:12	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-708-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284476
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 14:24

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

70845 SDG#: PH132-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:40	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:34	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:34	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:13	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:13	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:23	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		41.5	7.47	1
06944	Antimony	7440-36-0	4.15	U	4.15	0.767	1
06935	Arsenic	7440-38-2	6.21		4.15	0.725	1
06946	Barium	7440-39-3	72.3		1.04	0.0342	1
06947	Beryllium	7440-41-7	0.595	J	1.04	0.0694	1
07914	Boron	7440-42-8	3.01	J	10.4	0.870	1
06949	Cadmium	7440-43-9	0.169	J	1.04	0.0788	1
01650	Calcium	7440-70-2	2,070		20.7	3.46	1
06951	Chromium	7440-47-3	20.8		3.11	0.166	1
06952	Cobalt	7440-48-4	5.68		1.04	0.103	1
06953	Copper	7440-50-8	7.87		2.07	0.301	1
01654	Iron	7439-89-6	21,600		41.5	3.75	1
06955	Lead	7439-92-1	6.86		3.11	0.518	1
01656	Lithium	7439-93-2	16.8		4.1	0.35	1
01657	Magnesium	7439-95-4	4,360		10.4	1.73	1
06958	Manganese	7439-96-5	198		1.04	0.0860	1
06960	Molybdenum	7439-98-7	0.292	J	2.07	0.176	1
06961	Nickel	7440-02-0	6.97		2.07	0.135	1
10145	Phosphorus	7723-14-0	218		10.4	2.99	1
01662	Potassium	7440-09-7	1,780		104	8.64	1
01667	Sodium	7440-23-5	83.2	J	104	17.3	1
06969	Tin	7440-31-5	2.80	J	10.4	0.228	1
06970	Titanium	7440-32-6	1,070		1.04	0.176	1
06971	Vanadium	7440-62-2	42.5		1.04	0.135	1
06972	Zinc	7440-66-6	40.3		4.15	0.207	1
10146	Zirconium	7440-67-7	1.32	J	5.18	0.870	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.182	J	0.415	0.104	2
06142	Silver	7440-22-4	0.207	U	0.207	0.0269	2
06144	Strontium	7440-24-6	17.6		0.415	0.0705	2
06145	Thallium	7440-28-0	0.240		0.207	0.0311	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0121	J	0.0167	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.76		0.0100	0.0100	1
	The pH was measured in water at 6.76 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.01 U	1.01	0.0525	1
11031	12378-PeCDD	40321-76-4	0.0587 JBQ	5.07	0.0336	1
11031	123478-HxCDD	39227-28-6	0.0344 JBQ	5.07	0.0196	1
11031	123678-HxCDD	57653-85-7	0.0419 JBQ	5.07	0.0208	1
11031	123789-HxCDD	19408-74-3	0.0564 JBQ	5.07	0.0188	1
11031	1234678-HpCDD	35822-46-9	0.136 JBQ	5.07	0.0256	1
11031	OCDD	3268-87-9	0.465 JBQ	10.1	0.0188	1
11031	2378-TCDF	51207-31-9	0.0467 JQ	1.01	0.0449	1
11031	12378-PeCDF	57117-41-6	0.0566 JBQ	5.07	0.0190	1
11031	23478-PeCDF	57117-31-4	0.0343 JBQ	5.07	0.0173	1
11031	123478-HxCDF	70648-26-9	0.0429 JB	5.07	0.0176	1
11031	123678-HxCDF	57117-44-9	0.0280 JBQ	5.07	0.0172	1
11031	123789-HxCDF	72918-21-9	0.0464 JB	5.07	0.0184	1
11031	234678-HxCDF	60851-34-5	0.0281 JBQ	5.07	0.0168	1
11031	1234678-HpCDF	67562-39-4	0.0485 JB	5.07	0.0104	1
11031	1234789-HpCDF	55673-89-7	0.0433 JBQ	5.07	0.0128	1
11031	OCDF	39001-02-0	0.168 JB	10.1	0.0299	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00943			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	45	24 - 169
13C12-12378-PeCDF	52	24 - 185
13C12-23478-PeCDF	54	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	72	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330SLE026	12/05/2013 11:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13330SLE026	11/27/2013 08:30	Kerrie A Freeburn	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133300012A	11/29/2013 10:56	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133300012A	11/26/2013 16:15	JoElla L Rice	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133320015A	12/03/2013 19:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133320015A	12/01/2013 05:00	JoElla L Rice	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338003	12/08/2013 01:09	Joseph D Anderson	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13338003	12/04/2013 10:10	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:43	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:36	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:36	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:16	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:16	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-732-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7284477
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 13:38

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73200 SDG#: PH132-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:25	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13325039401A	11/21/2013 08:05	Noah M Rainbow	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13331162401A	11/28/2013 01:35	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10335	Acetone	67-64-1	20	U	20	6	1
10335	Acrolein	107-02-8	100	U	100	40	1
10335	Acrylonitrile	107-13-1	20	U	20	4	1
10335	t-Amyl methyl ether	994-05-8	5	U	5	0.8	1
10335	Benzene	71-43-2	5	U	5	0.5	1
10335	Bromobenzene	108-86-1	5	U	5	1	1
10335	Bromochloromethane	74-97-5	5	U	5	1	1
10335	Bromodichloromethane	75-27-4	5	U	5	1	1
10335	Bromoform	75-25-2	5	U	5	1	1
10335	Bromomethane	74-83-9	5	U	5	1	1
10335	2-Butanone	78-93-3	10	U	10	3	1
10335	t-Butyl alcohol	75-65-0	50	U	50	10	1
10335	n-Butylbenzene	104-51-8	5	U	5	1	1
10335	sec-Butylbenzene	135-98-8	5	U	5	1	1
10335	tert-Butylbenzene	98-06-6	5	U	5	1	1
10335	Carbon Disulfide	75-15-0	5	U	5	1	1
10335	Carbon Tetrachloride	56-23-5	5	U	5	1	1
10335	Chlorobenzene	108-90-7	5	U	5	0.8	1
10335	Chloroethane	75-00-3	5	U	5	1	1
10335	2-Chloroethyl Vinyl Ether	110-75-8	10	U	10	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10335	Chloroform	67-66-3	5	U	5	0.8	1
10335	1-Chlorohexane	544-10-5	5	U	5	1	1
10335	Chloromethane	74-87-3	5	U	5	1	1
10335	2-Chlorotoluene	95-49-8	5	U	5	1	1
10335	4-Chlorotoluene	106-43-4	5	U	5	1	1
10335	Chlorotrifluoroethene	79-38-9	5	U	5	2	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	5	U	5	2	1
10335	Dibromochloromethane	124-48-1	5	U	5	1	1
10335	1,2-Dibromoethane	106-93-4	5	U	5	1	1
10335	Dibromomethane	74-95-3	5	U	5	1	1
10335	1,2-Dichlorobenzene	95-50-1	5	U	5	1	1
10335	1,3-Dichlorobenzene	541-73-1	5	U	5	1	1
10335	1,4-Dichlorobenzene	106-46-7	5	U	5	1	1
10335	Dichlorodifluoromethane	75-71-8	5	U	5	2	1
10335	1,1-Dichloroethane	75-34-3	5	U	5	1	1
10335	1,2-Dichloroethane	107-06-2	5	U	5	1	1
10335	1,1-Dichloroethene	75-35-4	5	U	5	0.8	1
10335	cis-1,2-Dichloroethene	156-59-2	5	U	5	0.8	1
10335	trans-1,2-Dichloroethene	156-60-5	5	U	5	0.8	1
10335	1,2-Dichloropropane	78-87-5	5	U	5	1	1
10335	1,3-Dichloropropane	142-28-9	5	U	5	1	1
10335	2,2-Dichloropropane	594-20-7	5	U	5	1	1
10335	1,1-Dichloropropene	563-58-6	5	U	5	1	1
10335	cis-1,3-Dichloropropene	10061-01-5	5	U	5	1	1
10335	trans-1,3-Dichloropropene	10061-02-6	5	U	5	1	1
10335	Ethyl t-butyl ether	637-92-3	5	U	5	0.8	1
10335	Ethylbenzene	100-41-4	5	U	5	0.8	1
10335	Freon 113	76-13-1	5	U	5	2	1
10335	Freon 133a	75-88-7	5	U	5	2	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Hexachlorobutadiene	87-68-3	5	U	5	2	1
10335	2-Hexanone	591-78-6	10	U	10	3	1
10335	di-Isopropyl ether	108-20-3	5	U	5	0.8	1
10335	Isopropylbenzene	98-82-8	5	U	5	1	1
10335	p-Isopropyltoluene	99-87-6	5	U	5	1	1
10335	Methyl Iodide	74-88-4	5	U	5	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	5	U	5	0.5	1
10335	4-Methyl-2-pentanone	108-10-1	10	U	10	3	1
10335	Methylene Chloride	75-09-2	5	U	5	2	1
10335	n-Propylbenzene	103-65-1	5	U	5	1	1
10335	Styrene	100-42-5	5	U	5	1	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	5	U	5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	5	U	5	1	1
10335	Tetrachloroethene	127-18-4	5	U	5	0.8	1
10335	Toluene	108-88-3	5	U	5	0.7	1
10335	1,2,3-Trichlorobenzene	87-61-6	5	U	5	1	1
10335	1,2,4-Trichlorobenzene	120-82-1	5	U	5	1	1
10335	1,1,1-Trichloroethane	71-55-6	5	U	5	0.8	1
10335	1,1,2-Trichloroethane	79-00-5	5	U	5	0.8	1
10335	Trichloroethene	79-01-6	5	U	5	1	1
10335	Trichlorofluoromethane	75-69-4	5	U	5	2	1
10335	1,2,3-Trichloropropane	96-18-4	5	U	5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	5	U	5	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	5	U	5	1	1
10335	Vinyl Acetate	108-05-4	10	U	10	2	1
10335	Vinyl Chloride	75-01-4	5	U	5	1	1
10335	m+p-Xylene	179601-23-1	5	U	5	0.8	1
10335	o-Xylene	95-47-6	5	U	5	0.8	1
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/l**		**ug/l**	**ug/l**	
00527	1,4-Dioxane	123-91-1	2.0	U	2.0	0.5	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.053	U	0.053	0.011	1
12971	Acenaphthylene	208-96-8	0.053	U	0.053	0.011	1
12971	Anthracene	120-12-7	0.053	U	0.053	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.053	U	0.053	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.053	U	0.053	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.053	U	0.053	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.053	U	0.053	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.053	U	0.053	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.053	U	0.053	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.053	1
12971	Di-n-butylphthalate	84-74-2	0.22	J	1.1	0.053	1
12971	Chrysene	218-01-9	0.053	U	0.053	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.053	U	0.053	0.011	1
12971	Diethylphthalate	84-66-2	0.26	J	1.1	0.053	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.053	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.14	J	1.1	0.053	1
12971	Fluoranthene	206-44-0	0.053	U	0.053	0.011	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Fluorene	86-73-7	0.053	U	0.053	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	U	0.053	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.053	U	0.053	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.053	U	0.053	0.011	1
12971	Morpholine	110-91-8	20	U	20	20	1
12971	Naphthalene	91-20-3	0.053	U	0.053	0.032	1
12971	N-Nitrosodimethylamine	62-75-9	0.053	U	0.053	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.053	1
12971	Phenanthrene	85-01-8	0.053	U	0.053	0.032	1
12971	Pyrene	129-00-0	0.053	U	0.053	0.011	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Aldehydes & Ketones	**SW-846 8315A**		ug/l		ug/l	ug/l	
13022	Formaldehyde	50-00-0	50	U	50	30	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	
10407	2,4-D	94-75-7	0.48	U	0.48	0.15	1
10407	Dalapon	75-99-0	1.2	U	1.2	0.24	1
10407	2,4-DB	94-82-6	0.96	U	0.96	0.29	1
10407	Dicamba	1918-00-9	0.29	U	0.29	0.077	1
10407	Dinoseb	88-85-7	0.48	U	0.48	0.12	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10407	2,4-DP (Dichlorprop)	120-36-5	0.48	U	0.48	0.15	1
10407	MCPA	94-74-6	190	U	190	48	1
10407	MCPP	93-65-2	190	U	190	48	1
10407	2,4,5-T	93-76-5	0.048	U	0.048	0.014	1
10407	2,4,5-TP	93-72-1	0.048	U	0.048	0.0096	1
Pesticides/PCBs	**SW-846 8081B**		ug/l		ug/l	ug/l	
10589	Aldrin	309-00-2	0.0087	U	0.0087	0.0017	1
10589	Alpha BHC	319-84-6	0.0087	U	0.0087	0.0026	1
10589	Beta BHC	319-85-7	0.0087	U	0.0087	0.0029	1
10589	Gamma BHC - Lindane	58-89-9	0.0087	U	0.0087	0.0017	1
10589	Chlordane	57-74-9	0.43	U	0.43	0.14	1
10589	p,p-DDD	72-54-8	0.017	U	0.017	0.0043	1
10589	p,p-DDE	72-55-9	0.017	U	0.017	0.0043	1
10589	p,p-DDT	50-29-3	0.017	U	0.017	0.0045	1
10589	Delta BHC	319-86-8	0.0087	U	0.0087	0.0029	1
10589	Dieldrin	60-57-1	0.017	U	0.017	0.0046	1
10589	Endosulfan I	959-98-8	0.0087	U	0.0087	0.0037	1
10589	Endosulfan II	33213-65-9	0.017	U	0.017	0.013	1
10589	Endosulfan Sulfate	1031-07-8	0.017	U	0.017	0.0050	1
10589	Endrin	72-20-8	0.017	U	0.017	0.0070	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/l**	**ug/l**	**ug/l**	
10589	Endrin Aldehyde	7421-93-4	0.087 U	0.087	0.017	1
10589	Endrin Ketone	53494-70-5	0.017 U	0.017	0.0043	1
10589	Heptachlor	76-44-8	0.0087 U	0.0087	0.0017	1
10589	Heptachlor Epoxide	1024-57-3	0.0087 U	0.0087	0.0020	1
10589	Methoxychlor	72-43-5	0.087 U	0.087	0.026	1
10589	Mirex	2385-85-5	0.043 U	0.043	0.0087	1
10589	Toxaphene	8001-35-2	0.87 U	0.87	0.26	1
	The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.					
Pesticides/PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.43 U	0.43	0.087	1
13092	Aroclor 5442	12642-23-8	0.43 U	0.43	0.087	1
13092	Aroclor 5460	11126-42-4	0.43 U	0.43	0.095	1
13092	PCB-1016	12674-11-2	0.43 U	0.43	0.087	1
13092	PCB-1221	11104-28-2	0.43 U	0.43	0.087	1
13092	PCB-1232	11141-16-5	0.43 U	0.43	0.17	1
13092	PCB-1242	53469-21-9	0.43 U	0.43	0.087	1
13092	PCB-1248	12672-29-6	0.43 U	0.43	0.087	1
13092	PCB-1254	11097-69-1	0.43 U	0.43	0.087	1
13092	PCB-1260	11096-82-5	0.43 U	0.43	0.13	1
13092	PCB-1262	37324-23-5	0.43 U	0.43	0.17	1
13092	PCB-1268	11100-14-4	0.43 U	0.43	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	**mg/l**	
10319	m-Terphenyl	92-06-8	0.0049 U	0.0049	0.0019	1
10319	o-Terphenyl	84-15-1	0.0049 U	0.0049	0.0019	1
10319	p-Terphenyl	92-94-4	0.0049 U	0.0049	0.0019	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.096 U	0.096	0.048	1
10365	EFH (C15-C20)	n.a.	0.096 U	0.096	0.048	1
10365	EFH (C21-C30)	n.a.	0.096 U	0.096	0.048	1
10365	EFH (C30 - C40)	n.a.	0.48 U	0.48	0.096	1
10365	EFH (C8-C11)	n.a.	0.096 U	0.096	0.048	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0400 U	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	6.7	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name		CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	2378-TCDD		1746-01-6	1.94	U	1.94	0.613	1
10915	12378-PeCDD		40321-76-4	9.69	U	9.69	0.543	1
10915	123478-HxCDD		39227-28-6	0.451	JBQ	9.69	0.283	1
10915	123678-HxCDD		57653-85-7	9.69	U	9.69	0.312	1
10915	123789-HxCDD		19408-74-3	0.318	JBQ	9.69	0.290	1
10915	1234678-HpCDD		35822-46-9	0.811	JBQ	9.69	0.422	1
10915	OCDD		3268-87-9	1.73	JB	19.4	0.475	1
10915	2378-TCDF		51207-31-9	1.94	U	1.94	0.426	1
10915	12378-PeCDF		57117-41-6	0.816	JB	9.69	0.288	1
10915	23478-PeCDF		57117-31-4	0.495	JBQ	9.69	0.262	1
10915	123478-HxCDF		70648-26-9	0.728	JBQ	9.69	0.215	1
10915	123678-HxCDF		57117-44-9	0.775	JBQ	9.69	0.219	1
10915	123789-HxCDF		72918-21-9	0.434	JBQ	9.69	0.248	1
10915	234678-HxCDF		60851-34-5	0.652	JB	9.69	0.215	1
10915	1234678-HpCDF		67562-39-4	9.69	U	9.69	0.149	1
10915	1234789-HpCDF		55673-89-7	0.559	JBQ	9.69	0.193	1
10915	OCDF		39001-02-0	1.92	JBQ	19.4	0.711	1
D/F Toxic Equivalents	**EPA 1613B**			pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0		n.a.	0.0902				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	52	25 - 181
13C12-123478-HxCDD	62	32 - 141
13C12-123678-HxCDD	61	28 - 130
13C12-123789-HxCDD	61	28 - 130
13C12-1234678-HpCDD	52	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	54	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	56	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	12b Volatile Organics EPA8260B	SW-846 8260B	1	Y133301AA	11/26/2013 22:29	Kevin A Sposito	1
00527	13b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E133272AA	11/23/2013 13:39	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E133272AA	11/23/2013 13:39	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y133301AA	11/26/2013 22:29	Kevin A Sposito	1
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13330WAA026	11/29/2013 18:55	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13330WAA026	11/26/2013 18:00	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13325A94A	11/22/2013 02:03	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13325A94A	11/22/2013 02:03	Marie D Beamenderfer	1
13022	19b Formaldehyde 8315A	SW-846 8315A	1	133250022A	11/22/2013 15:19	Jessica L Miller	1
10407	24b Herbicides by EPA 8151A	SW-846 8151A	1	133270036A	11/27/2013 03:34	Lisa A Reinert	1
10589	22b Pesticides by EPA 8081B	SW-846 8081B	1	133290006A	11/26/2013 19:34	Lisa A Reinert	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133290007A	11/29/2013 04:48	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133290007A	11/25/2013 15:45	Seth A Farrier	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	133290006A	11/25/2013 15:45	Seth A Farrier	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	133270036A	11/25/2013 09:20	Kelli M Barto	1
01013	Formaldehyde Extraction	SW-846 8315A	1	133250022A	11/22/2013 00:15	David V Hershey Jr	1
10319	23b Terphenyls by 8015B	SW-846 8015B	1	133270034A	11/26/2013 12:57	Glorines Suarez-Rivera	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133260024A	11/24/2013 02:17	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133260024A	11/23/2013 07:20	Roman Kuropatkin	1
10304	Terphenyls water prep	SW-846 3510C	1	133270034A	11/25/2013 10:00	William H Saadeh	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13330001	11/28/2013 03:33	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13330001	11/26/2013 10:30	Brett M Weidman	1
01743	Aluminum	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07044	Antimony	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07035	Arsenic	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07046	Barium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07047	Beryllium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
08014	Boron	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-111913 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7284478
LL Group # 1435253
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/19/2013 15:00

Submitted: 11/20/2013 10:10
Reported: 12/12/2013 16:42

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

132EB SDG#: PH132-12EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07049	Cadmium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01750	Calcium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07051	Chromium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07052	Cobalt	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07053	Copper	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01754	Iron	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07055	Lead	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01756	Lithium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01757	Magnesium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07058	Manganese	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07060	Molybdenum	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07061	Nickel	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01762	Potassium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
01767	Sodium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07069	Tin	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07070	Titanium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07071	Vanadium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
07072	Zinc	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
10144	Zirconium	SW-846 6010C	1	133240635002	11/22/2013 00:35	John W Yanzuk II	1
06041	Selenium	SW-846 6020A	1	133240639002B	11/22/2013 22:27	John P Hook	1
06042	Silver	SW-846 6020A	1	133240639002A	11/22/2013 22:27	John P Hook	1
06044	Strontium	SW-846 6020A	1	133240639002A	11/22/2013 22:27	John P Hook	1
06045	Thallium	SW-846 6020A	1	133240639002A	11/22/2013 22:27	John P Hook	1
00259	3b Mercury 7470A	SW-846 7470A	1	133255713006	11/22/2013 06:42	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133240635002	11/21/2013 11:55	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133240639002	11/21/2013 12:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133255713006	11/21/2013 16:40	Nelli S Markaryan	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13324987301B	11/20/2013 13:32	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13325003101A	11/21/2013 10:51	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B133252AA	Sample number(s): 7284466-7284467								
Acetone	20 U	20.	7	ug/kg	98		23-171		
Acrolein	100 U	100.	20	ug/kg	77		50-137		
Acrylonitrile	20 U	20.	4	ug/kg	94		58-123		
t-Amyl methyl ether	5 U	5.	1	ug/kg	87		63-130		
Benzene	5 U	5.	0.5	ug/kg	93		80-120		
Bromobenzene	5 U	5.	1	ug/kg	89		80-120		
Bromochloromethane	5 U	5.	1	ug/kg	104		75-129		
Bromodichloromethane	5 U	5.	1	ug/kg	91		75-120		
Bromoform	5 U	5.	1	ug/kg	95		70-120		
Bromomethane	5 U	5.	2	ug/kg	102		32-162		
2-Butanone	10 U	10.	4	ug/kg	96		38-146		
t-Butyl alcohol	50 U	50.	20	ug/kg	93		60-149		
n-Butylbenzene	5 U	5.	1	ug/kg	91		72-120		
sec-Butylbenzene	5 U	5.	1	ug/kg	89		75-120		
tert-Butylbenzene	5 U	5.	1	ug/kg	86		75-120		
Carbon Disulfide	5 U	5.	1	ug/kg	90		63-128		
Carbon Tetrachloride	5 U	5.	1	ug/kg	94		69-122		
Chlorobenzene	5 U	5.	1	ug/kg	96		80-120		
Chloroethane	5 U	5.	2	ug/kg	96		17-171		
2-Chloroethyl Vinyl Ether	10 U	10.	2	ug/kg	61		44-137		
Chloroform	5 U	5.	1	ug/kg	98		80-120		
1-Chlorohexane	5 U	5.	1	ug/kg	98		70-130		
Chloromethane	5 U	5.	2	ug/kg	95		56-120		
2-Chlorotoluene	5 U	5.	1	ug/kg	92		78-120		
4-Chlorotoluene	5 U	5.	1	ug/kg	89		79-120		
Chlorotrifluoroethene	5 U	5.	2	ug/kg	90		22-131		
1,2-Dibromo-3-chloropropane	5 U	5.	2	ug/kg	96		55-128		
Dibromochloromethane	5 U	5.	1	ug/kg	94		77-120		
1,2-Dibromoethane	5 U	5.	1	ug/kg	96		80-120		
Dibromomethane	5 U	5.	1	ug/kg	96		80-120		
1,2-Dichlorobenzene	5 U	5.	1	ug/kg	93		80-120		
1,3-Dichlorobenzene	5 U	5.	1	ug/kg	91		80-120		
1,4-Dichlorobenzene	5 U	5.	1	ug/kg	92		80-120		
Dichlorodifluoromethane	5 U	5.	2	ug/kg	88		32-120		
1,1-Dichloroethane	5 U	5.	1	ug/kg	97		80-120		
1,2-Dichloroethane	5 U	5.	1	ug/kg	101		72-126		
1,1-Dichloroethene	5 U	5.	1	ug/kg	100		73-129		
cis-1,2-Dichloroethene	5 U	5.	1	ug/kg	93		80-120		
trans-1,2-Dichloroethene	5 U	5.	1	ug/kg	99		79-120		
1,2-Dichloropropane	5 U	5.	1	ug/kg	96		77-120		
1,3-Dichloropropane	5 U	5.	1	ug/kg	94		80-120		
2,2-Dichloropropane	5 U	5.	1	ug/kg	90		72-123		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5	U	5.	1	ug/kg	91		77-120		
cis-1,3-Dichloropropene	5	U	5.	1	ug/kg	93		74-120		
trans-1,3-Dichloropropene	5	U	5.	1	ug/kg	84		77-120		
Ethyl t-butyl ether	5	U	5.	1	ug/kg	86		64-124		
Ethylbenzene	5	U	5.	1	ug/kg	92		80-120		
Freon 113	5	U	5.	2	ug/kg	83		64-137		
Freon 133a	5	U	5.	2	ug/kg	107		78-120		
Hexachlorobutadiene	5	U	5.	2	ug/kg	90		46-130		
2-Hexanone	10	U	10.	3	ug/kg	81		40-129		
di-Isopropyl ether	5	U	5.	1	ug/kg	93		68-128		
Isopropylbenzene	5	U	5.	1	ug/kg	93		76-120		
p-Isopropyltoluene	5	U	5.	1	ug/kg	90		75-120		
Methyl Iodide	5	U	5.	3	ug/kg	101		72-130		
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/kg	99		69-126		
4-Methyl-2-pentanone	10	U	10.	3	ug/kg	82		52-125		
Methylene Chloride	5	U	5.	2	ug/kg	105		80-124		
n-Propylbenzene	5	U	5.	1	ug/kg	96		77-120		
Styrene	5	U	5.	1	ug/kg	96		76-120		
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/kg	90		80-120		
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/kg	94		71-123		
Tetrachloroethene	5	U	5.	1	ug/kg	104		78-126		
Toluene	5	U	5.	1	ug/kg	94		80-120		
1,2,3-Trichlorobenzene	5	U	5.	1	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	5	U	5.	1	ug/kg	85		68-120		
1,1,1-Trichloroethane	5	U	5.	1	ug/kg	104		71-125		
1,1,2-Trichloroethane	5	U	5.	1	ug/kg	98		80-120		
Trichloroethene	5	U	5.	1	ug/kg	96		80-120		
Trichlorofluoromethane	5	U	5.	2	ug/kg	94		58-133		
1,2,3-Trichloropropane	5	U	5.	1	ug/kg	95		71-123		
1,2,4-Trimethylbenzene	5	U	5.	1	ug/kg	92		79-120		
1,3,5-Trimethylbenzene	5	U	5.	1	ug/kg	92		78-120		
Vinyl Acetate	10	U	10.	2	ug/kg	152*		40-127		
Vinyl Chloride	5	U	5.	1	ug/kg	97		53-120		
m+p-Xylene	5	U	5.	1	ug/kg	95		80-120		
o-Xylene	5	U	5.	1	ug/kg	90		80-120		
Batch number: E133272AA	Sample number(s): 7284478									
1,4-Dioxane	2.0	U	2.0	0.5	ug/l	99		80-123		
Batch number: E133291AA	Sample number(s): 7284466-7284467									
1,4-Dioxane	15	U	15.	5.0	ug/kg	101	108	70-130	7	30
Batch number: Y133301AA	Sample number(s): 7284478									
Acetone	20	U	20.	6	ug/l	80	79	38-157	2	30
Acrolein	100 U		100.	40	ug/l	68	69	46-146	2	30
Acrylonitrile	20	U	20.	4	ug/l	82	80	61-130	2	30
t-Amyl methyl ether	5	U	5.	0.8	ug/l	89	89	75-120	0	30
Benzene	5	U	5.	0.5	ug/l	102	101	78-120	1	30
Bromobenzene	5	U	5.	1	ug/l	96	95	80-120	1	30
Bromochloromethane	5	U	5.	1	ug/l	104	102	80-121	2	30
Bromodichloromethane	5	U	5.	1	ug/l	91	89	73-120	2	30
Bromoform	5	U	5.	1	ug/l	82	81	61-120	1	30
Bromomethane	5	U	5.	1	ug/l	74	73	51-120	1	30
2-Butanone	10	U	10.	3	ug/l	81	80	58-126	2	30
t-Butyl alcohol	50	U	50.	10	ug/l	89	89	75-120	0	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
n-Butylbenzene	5	U	5.	1	ug/l	97	96	80-120	1	30
sec-Butylbenzene	5	U	5.	1	ug/l	102	101	80-120	1	30
tert-Butylbenzene	5	U	5.	1	ug/l	96	96	80-120	1	30
Carbon Disulfide	5	U	5.	1	ug/l	75	75	58-126	0	30
Carbon Tetrachloride	5	U	5.	1	ug/l	98	97	74-130	1	30
Chlorobenzene	5	U	5.	0.8	ug/l	102	101	80-120	1	30
Chloroethane	5	U	5.	1	ug/l	65	66	45-120	2	30
2-Chloroethyl Vinyl Ether	10	U	10.	2	ug/l	90	90	59-126	0	30
Chloroform	5	U	5.	0.8	ug/l	102	101	77-122	2	30
1-Chlorohexane	5	U	5.	1	ug/l	102	102	70-130	0	30
Chloromethane	5	U	5.	1	ug/l	89	87	55-120	2	30
2-Chlorotoluene	5	U	5.	1	ug/l	98	97	80-120	1	30
4-Chlorotoluene	5	U	5.	1	ug/l	97	96	80-120	0	30
Chlorotrifluoroethene	5	U	5.	2	ug/l	87	87	47-120	0	30
1,2-Dibromo-3-chloropropane	5	U	5.	2	ug/l	79	78	56-120	1	30
Dibromochloromethane	5	U	5.	1	ug/l	91	89	72-120	3	30
1,2-Dibromoethane	5	U	5.	1	ug/l	97	95	76-120	1	30
Dibromomethane	5	U	5.	1	ug/l	93	91	80-120	2	30
1,2-Dichlorobenzene	5	U	5.	1	ug/l	101	99	80-120	2	30
1,3-Dichlorobenzene	5	U	5.	1	ug/l	99	98	80-120	1	30
1,4-Dichlorobenzene	5	U	5.	1	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	5	U	5.	2	ug/l	90	88	35-122	2	30
1,1-Dichloroethane	5	U	5.	1	ug/l	100	100	80-120	0	30
1,2-Dichloroethane	5	U	5.	1	ug/l	98	97	71-130	1	30
1,1-Dichloroethene	5	U	5.	0.8	ug/l	95	95	76-124	0	30
cis-1,2-Dichloroethene	5	U	5.	0.8	ug/l	102	101	80-120	1	30
trans-1,2-Dichloroethene	5	U	5.	0.8	ug/l	104	102	80-120	2	30
1,2-Dichloropropane	5	U	5.	1	ug/l	101	101	80-120	0	30
1,3-Dichloropropane	5	U	5.	1	ug/l	95	94	80-120	1	30
2,2-Dichloropropane	5	U	5.	1	ug/l	89	87	67-124	2	30
1,1-Dichloropropene	5	U	5.	1	ug/l	106	105	80-120	1	30
cis-1,3-Dichloropropene	5	U	5.	1	ug/l	95	94	80-120	1	30
trans-1,3-Dichloropropene	5	U	5.	1	ug/l	90	89	69-120	1	30
Ethyl t-butyl ether	5	U	5.	0.8	ug/l	91	90	74-120	1	30
Ethylbenzene	5	U	5.	0.8	ug/l	98	98	79-120	1	30
Freon 113	5	U	5.	2	ug/l	101	99	63-133	2	30
Freon 133a	5	U	5.	2	ug/l	97	97	64-120	0	30
Hexachlorobutadiene	5	U	5.	2	ug/l	84	83	50-133	1	30
2-Hexanone	10	U	10.	3	ug/l	78	77	59-125	2	30
di-Isopropyl ether	5	U	5.	0.8	ug/l	95	94	65-120	1	30
Isopropylbenzene	5	U	5.	1	ug/l	99	99	77-120	0	30
p-Isopropyltoluene	5	U	5.	1	ug/l	96	96	80-120	1	30
Methyl Iodide	5	U	5.	1	ug/l	96	95	71-122	1	30
Methyl Tertiary Butyl Ether	5	U	5.	0.5	ug/l	98	96	75-120	1	30
4-Methyl-2-pentanone	10	U	10.	3	ug/l	83	82	59-120	1	30
Methylene Chloride	5	U	5.	2	ug/l	99	98	80-120	1	30
n-Propylbenzene	5	U	5.	1	ug/l	103	102	80-120	1	30
Styrene	5	U	5.	1	ug/l	96	94	80-120	2	30
1,1,1,2-Tetrachloroethane	5	U	5.	1	ug/l	95	94	80-120	1	30
1,1,2,2-Tetrachloroethane	5	U	5.	1	ug/l	92	91	70-120	1	30
Tetrachloroethene	5	U	5.	0.8	ug/l	103	101	80-120	2	30
Toluene	5	U	5.	0.7	ug/l	103	101	80-120	2	30
1,2,3-Trichlorobenzene	5	U	5.	1	ug/l	88	88	58-126	0	30
1,2,4-Trichlorobenzene	5	U	5.	1	ug/l	88	88	65-120	0	30
1,1,1-Trichloroethane	5	U	5.	0.8	ug/l	92	92	66-126	0	30
1,1,2-Trichloroethane	5	U	5.	0.8	ug/l	98	96	80-120	1	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Trichloroethene	5	U	5.	1	ug/l	103	103	80-120	1	30
Trichlorofluoromethane	5	U	5.	2	ug/l	92	90	65-130	2	30
1,2,3-Trichloropropane	5	U	5.	1	ug/l	89	87	76-120	2	30
1,2,4-Trimethylbenzene	5	U	5.	1	ug/l	100	99	74-120	1	30
1,3,5-Trimethylbenzene	5	U	5.	1	ug/l	100	99	74-120	1	30
Vinyl Acetate	10	U	10.	2	ug/l	110	109	56-135	1	30
Vinyl Chloride	5	U	5.	1	ug/l	93	91	63-120	2	30
m+p-Xylene	5	U	5.	0.8	ug/l	100	99	80-120	1	30
o-Xylene	5	U	5.	0.8	ug/l	98	97	80-120	1	30
Batch number: 13330SLE026	Sample number(s): 7284465-7284473,7284475-7284477									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	103		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	92		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	94		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	96		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	97		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	103		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	87		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	98		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	96		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	86		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	90		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	96		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	99		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	87		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	92		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	85		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	93		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	96		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	99		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	98		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	96		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	95		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	89		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	82		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	95		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	100		79-112		
Batch number: 13330WAA026	Sample number(s): 7284478									
Acenaphthene	0.050	U	0.050	0.010	ug/l	106	98	77-118	8	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	112	105	80-123	7	30
Anthracene	0.050	U	0.050	0.010	ug/l	109	103	78-123	6	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	109	104	73-127	4	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	98	72-120	5	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	109	104	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	97	93	70-130	4	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	100	95	64-130	4	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	105	101	73-131	4	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	103	102	40-138	2	30
Di-n-butylphthalate	0.23	J	1.0	0.050	ug/l	126	129	64-141	2	30
Chrysene	0.050	U	0.050	0.010	ug/l	103	98	76-125	5	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	103	99	58-131	4	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	112	107	64-128	5	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	100	94	23-139	5	30
Bis(2-Ethylhexyl)phthalate	0.12	J	1.0	0.050	ug/l	130	116	70-143	11	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	105	100	79-124	6	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluorene	0.050	U	0.050	0.010	ug/l	105	98	74-115	7	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	101	97	62-130	4	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	106	99	80-126	6	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	107	101	81-124	6	30
Morpholine	20	U	20.	20	ug/l					
Naphthalene	0.050	U	0.050	0.030	ug/l	103	98	75-120	6	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	78	76	36-120	3	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	121	120	57-145	1	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	103	97	75-120	6	30
Pyrene	0.050	U	0.050	0.010	ug/l	108	102	71-130	6	30
Batch number: 13325A94A	Sample number(s): 7284464,7284478									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	107	103	75-135	3	30
Batch number: 13329B16A	Sample number(s): 7284466-7284468,7284470,7284476									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	92		67-119		
Batch number: 133250022A	Sample number(s): 7284478									
Formaldehyde	50	U	50.	30	ug/l	93	94	69-130	1	30
Batch number: 133270036A	Sample number(s): 7284478									
2,4-D	0.50	U	0.50	0.16	ug/l	135	125	68-155	8	30
Dalapon	1.3	U	1.3	0.25	ug/l	87	76	25-119	14	30
2,4-DB	1.0	U	1.0	0.30	ug/l	107	97	50-163	10	30
Dicamba	0.30	U	0.30	0.080	ug/l	106	102	64-163	4	30
Dinoseb	0.50	U	0.50	0.12	ug/l	170*	155	16-163	9	30
2,4-DP (Dichlorprop)	0.50	U	0.50	0.16	ug/l	142	135	89-162	5	30
MCPA	200 U		200.	50	ug/l	97	90	68-154	7	30
MCPP	200 U		200.	50	ug/l	107	98	46-173	9	30
2,4,5-T	0.050	U	0.050	0.015	ug/l	122	117	71-174	4	30
2,4,5-TP	0.050	U	0.050	0.010	ug/l	115	111	58-155	3	30
Batch number: 133270022A	Sample number(s): 7284471-7284473,7284475-7284476									
Aldrin	0.83	U	0.83	0.17	ug/kg	99		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	101		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	106		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	99		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	106		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	110		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	100		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	103		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	105		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	94		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	100		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	107		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	102		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	102		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	100		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	100		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	106		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	100		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133290006A	Sample number(s): 7284478								
Aldrin	0.0080 U	0.0080	0.0016	ug/l	83	90	45-125	7	30
Alpha BHC	0.0080 U	0.0080	0.0024	ug/l	89	96	51-139	7	30
Beta BHC	0.0080 U	0.0080	0.0027	ug/l	97	100	57-127	3	30
Gamma BHC - Lindane	0.0080 U	0.0080	0.0016	ug/l	88	93	57-133	6	30
Chlordane	0.40 U	0.40	0.13	ug/l					
p,p-DDD	0.016 U	0.016	0.0040	ug/l	90	91	55-145	1	30
p,p-DDE	0.016 U	0.016	0.0040	ug/l	100	99	58-130	0	30
p,p-DDT	0.016 U	0.016	0.0042	ug/l	64	62	45-140	2	30
Delta BHC	0.0080 U	0.0080	0.0027	ug/l	83	89	52-133	6	30
Dieldrin	0.016 U	0.016	0.0042	ug/l	93	97	60-135	4	30
Endosulfan I	0.0080 U	0.0080	0.0034	ug/l	88	89	56-128	2	30
Endosulfan II	0.016 U	0.016	0.012	ug/l	93	93	53-123	0	30
Endosulfan Sulfate	0.016 U	0.016	0.0046	ug/l	84	85	51-130	2	30
Endrin	0.016 U	0.016	0.0065	ug/l	15*	86	43-139	140*	30
Endrin Aldehyde	0.080 U	0.080	0.016	ug/l	110	86	50-122	24*	20
Endrin Ketone	0.016 U	0.016	0.0040	ug/l	116	84	51-133	32*	30
Heptachlor	0.0080 U	0.0080	0.0016	ug/l	73	82	48-130	11	30
Heptachlor Epoxide	0.0080 U	0.0080	0.0018	ug/l	94	97	65-128	3	30
Methoxychlor	0.080 U	0.080	0.024	ug/l	59	60	40-150	2	30
Mirex	0.040 U	0.040	0.0080	ug/l					
Toxaphene	0.80 U	0.80	0.24	ug/l					
Batch number: 133290007A	Sample number(s): 7284478								
Aroclor 5432	0.40 U	0.40	0.080	ug/l					
Aroclor 5442	0.40 U	0.40	0.080	ug/l	69	67	35-84	3	30
Aroclor 5460	0.40 U	0.40	0.088	ug/l					
PCB-1016	0.40 U	0.40	0.080	ug/l	108	94	67-117	14	30
PCB-1221	0.40 U	0.40	0.080	ug/l					
PCB-1232	0.40 U	0.40	0.16	ug/l					
PCB-1242	0.40 U	0.40	0.080	ug/l					
PCB-1248	0.40 U	0.40	0.080	ug/l					
PCB-1254	0.40 U	0.40	0.080	ug/l					
PCB-1260	0.40 U	0.40	0.12	ug/l	115	112	67-128	3	30
PCB-1262	0.40 U	0.40	0.16	ug/l					
PCB-1268	0.40 U	0.40	0.13	ug/l					
Batch number: 133300012A	Sample number(s): 7284465-7284473,7284475-7284477								
Aroclor 5432	33 U	33.	10	ug/kg					
Aroclor 5442	33 U	33.	10	ug/kg	77	79	62-87	3	30
Aroclor 5460	33 U	33.	10	ug/kg					
PCB-1016	17 U	17.	3.3	ug/kg	90		82-116		
PCB-1221	17 U	17.	5.1	ug/kg					
PCB-1232	17 U	17.	4.1	ug/kg					
PCB-1242	17 U	17.	4.1	ug/kg					
PCB-1248	17 U	17.	3.3	ug/kg					
PCB-1254	17 U	17.	4.4	ug/kg					
PCB-1260	17 U	17.	3.9	ug/kg	99		84-125		
PCB-1262	17 U	17.	3.3	ug/kg					
PCB-1268	17 U	17.	3.3	ug/kg					
Batch number: 133260024A	Sample number(s): 7284478								
EFH (C12-C14)	0.10 U	0.10	0.050	mg/l	87	85	70-130	3	30
EFH (C15-C20)	0.10 U	0.10	0.050	mg/l	91	88	70-130	3	30
EFH (C21-C30)	0.10 U	0.10	0.050	mg/l	89	86	70-130	4	30

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	68*	66*	70-130	4	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	71	69*	70-130	3	30
Batch number: 133270034A	Sample number(s): 7284478									
m-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	102	101	61-108	1	20
o-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	101	100	75-125	1	20
p-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	101	100	63-110	1	20
Batch number: 133320015A	Sample number(s): 7284465-7284473,7284475-7284477									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	109		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	107		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	105		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	90		60-115		
Batch number: 133240635002	Sample number(s): 7284478									
Aluminum	0.400	U	0.400	0.0828	mg/l	103	103	90-112	0	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	106	106	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	100	100	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	101	101	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	99	99	90-111	0	20
Boron	0.100	U	0.100	0.0084	mg/l	97	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	102	100	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	101	101	90-112	0	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	101	100	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	102	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	102	103	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	103	102	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	103	103	88-110	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	102	102	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	100	101	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	102	102	90-110	0	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	103	103	90-110	0	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	103	90-111	1	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	102	101	90-110	0	20
Potassium	1.00	U	1.00	0.0980	mg/l	100	99	90-110	1	20
Sodium	2.00	U	2.00	0.167	mg/l	101	101	87-114	0	20
Tin	0.0400	U	0.0400	0.0029	mg/l	102	101	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	104	103	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0400	U	0.0400	0.0020	mg/l	101	100	90-110	1	20
Zirconium	0.100	U	0.100	0.0084	mg/l	104	104	90-110	0	20
Batch number: 133240639002A	Sample number(s): 7284478									
Silver	0.0010	U	0.0010	0.00011	mg/l	100	103	90-115	3	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	102	100	90-110	2	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	104	104	90-115	0	20
Batch number: 133240639002B	Sample number(s): 7284478									
Selenium	0.0040	U	0.0040	0.00050	mg/l	98	108	90-120	9	20
Batch number: 133255713006	Sample number(s): 7284478									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	99	105	90-115	6	20
Batch number: 133360637002	Sample number(s): 7284465-7284477									

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	108		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	111		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	105		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	108		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.57	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 133360637002A	Sample number(s): 7284465-7284477									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	96		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	97		80-120		
Batch number: 133360637002B	Sample number(s): 7284465-7284477									
Selenium	0.400	U	0.400	0.100	mg/kg	108		80-120		
Batch number: 133360638002	Sample number(s): 7284465-7284477									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 13324987301B	Sample number(s): 7284478									
2b Chromium VI by EPA 7199	10.0	U	10.0	5.0	ug/l	107	99	90-110	8	20
Batch number: 13330243201A	Sample number(s): 7284469-7284470									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	101		80-120		
Batch number: 13325003101A	Sample number(s): 7284478									
28b pH (9040B and 9040C)						98		93-106		
Batch number: 13325039401A	Sample number(s): 7284465-7284471,7284474-7284477									
15a pH by 9045D						99		95-105		
Batch number: 13331162401A	Sample number(s): 7284465-7284477									
14a Moisture Content by 160.3						99		80-120		
14a Moisture Content by 160.3						99		80-120		
14a Moisture Content by 160.3						99		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Analysis Name	**Blank Result**		**Blank MRL****	**Blank EDL**	**Report Units**	**OPR %REC**	**OPRD %REC**	**OPR/OPRD Limits**	**RPD**	**RPD Max**
Batch number: 13330001	Sample number(s): 7284478									
2378-TCDD	1.57	J	2.00	1.14	pg/l	103		60-150		
12378-PeCDD	3.27	J	10.0	1.07	pg/l	103		60-150		
123478-HxCDD	3.22	J	10.0	0.721	pg/l	104		60-150		
123678-HxCDD	2.56	J	10.0	0.816	pg/l	107		60-150		
123789-HxCDD	2.77	J	10.0	0.785	pg/l	107		60-150		
1234678-HpCDD	3.16	J	10.0	1.15	pg/l	106		60-150		
OCDD	10.1	J	20.0	1.49	pg/l	105		60-150		
2378-TCDF	2.00	U	2.00	0.727	pg/l	101		60-150		
12378-PeCDF	2.52	J	10.0	0.517	pg/l	102		60-150		
23478-PeCDF	2.59	J	10.0	0.506	pg/l	104		60-150		
123478-HxCDF	3.09	J	10.0	0.576	pg/l	104		60-150		
123678-HxCDF	2.03	J	10.0	0.603	pg/l	100		60-150		
123789-HxCDF	3.29	J	10.0	0.717	pg/l	102		60-150		
234678-HxCDF	3.56	J	10.0	0.583	pg/l	105		60-150		
1234678-HpCDF	2.75	J	10.0	0.412	pg/l	102		60-150		
1234789-HpCDF	3.86	J	10.0	0.574	pg/l	103		60-150		
OCDF	9.74	J	20.0	2.31	pg/l	99		60-150		
Batch number: 13338003	Sample number(s): 7284465-7284473,7284475-7284477									
2378-TCDD	1.00	U	1.00	0.0744	ng/kg	105		67-158		
12378-PeCDD	0.0654	J	5.00	0.0460	ng/kg	103		70-142		
123478-HxCDD	0.0435	J	5.00	0.0241	ng/kg	105		70-164		
123678-HxCDD	0.0385	J	5.00	0.0253	ng/kg	105		76-134		
123789-HxCDD	0.0586	J	5.00	0.0233	ng/kg	104		64-162		
1234678-HpCDD	0.0626	J	5.00	0.0226	ng/kg	103		70-140		
OCDD	0.158	J	10.0	0.0208	ng/kg	102		78-144		
2378-TCDF	1.00	U	1.00	0.0684	ng/kg	105		75-158		
12378-PeCDF	0.111	J	5.00	0.0227	ng/kg	105		80-134		
23478-PeCDF	0.0386	J	5.00	0.0215	ng/kg	105		68-160		
123478-HxCDF	0.0672	J	5.00	0.0182	ng/kg	102		72-134		
123678-HxCDF	0.0661	J	5.00	0.0176	ng/kg	105		84-130		
123789-HxCDF	0.0912	J	5.00	0.0173	ng/kg	105		78-130		
234678-HxCDF	0.0394	J	5.00	0.0175	ng/kg	105		70-156		
1234678-HpCDF	0.0499	J	5.00	0.0105	ng/kg	105		82-122		
1234789-HpCDF	0.0505	J	5.00	0.0129	ng/kg	104		78-138		
OCDF	0.154	J	10.0	0.0293	ng/kg	101		63-170		
Batch number: 13330001	Sample number(s): 7284478									
TEQ WHO 2005 - EDLx0.0	3.70				pg/l					
Batch number: 13338003	Sample number(s): 7284465-7284473,7284475-7284477									
TEQ WHO 2005 - EDLx0.0	0.00440				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B133252AA	Sample number(s): 7284466-7284467 UNSPK: P279108								
Acetone	88	98	31-195	9	30				
Acrolein	103	101	10-165	3	30				
Acrylonitrile	94	104	48-139	9	30				
t-Amyl methyl ether	95	104	50-132	8	30				
Benzene	107	112	55-143	3	30				
Bromobenzene	103	108	43-139	4	30				
Bromochloromethane	125	125	60-137	1	30				
Bromodichloromethane	103	109	53-136	5	30				
Bromoform	101	108	38-124	6	30				
Bromomethane	121	124	42-168	2	30				
2-Butanone	95	106	37-163	10	30				
t-Butyl alcohol	116	124	47-153	6	30				
n-Butylbenzene	108	115	30-146	5	30				
sec-Butylbenzene	109	115	33-157	4	30				
tert-Butylbenzene	106	109	41-152	2	30				
Carbon Disulfide	108	114	48-146	4	30				
Carbon Tetrachloride	113	120	45-153	5	30				
Chlorobenzene	108	109	49-135	0	30				
Chloroethane	114	118	39-152	3	30				
2-Chloroethyl Vinyl Ether	70	71	32-139	0	30				
Chloroform	112	118	61-142	4	30				
1-Chlorohexane	106	104	70-130	3	30				
Chloromethane	118	123	36-143	3	30				
2-Chlorotoluene	107	110	42-146	3	30				
4-Chlorotoluene	105	110	39-145	3	30				
Chlorotrifluoroethene	31*	26*	70-130	17	30				
1,2-Dibromo-3-chloropropane	92	102	30-139	9	30				
Dibromochloromethane	103	110	51-128	6	30				
1,2-Dibromoethane	103	111	54-129	7	30				
Dibromomethane	107	113	57-130	5	30				
1,2-Dichlorobenzene	105	109	36-133	3	30				
1,3-Dichlorobenzene	105	111	34-134	5	30				
1,4-Dichlorobenzene	105	110	35-136	4	30				
Dichlorodifluoromethane	130	134	26-151	3	30				
1,1-Dichloroethane	111	118	63-142	5	30				
1,2-Dichloroethane	109	117	54-143	6	30				
1,1-Dichloroethene	122	128	61-149	4	30				
cis-1,2-Dichloroethene	108	114	53-146	5	30				
trans-1,2-Dichloroethene	111	115	51-153	3	30				
1,2-Dichloropropane	111	114	54-144	2	30				
1,3-Dichloropropane	105	109	51-140	3	30				
2,2-Dichloropropane	108	113	53-147	4	30				
1,1-Dichloropropene	111	116	54-145	4	30				
cis-1,3-Dichloropropene	107	112	45-137	4	30				
trans-1,3-Dichloropropene	97	103	41-129	5	30				
Ethyl t-butyl ether	95	104	58-124	8	30				
Ethylbenzene	109	112	44-141	2	30				
Freon 113	118	122	56-156	3	30				
Freon 133a	95	94	61-131	2	30				
Hexachlorobutadiene	91	100	10-155	8	30				

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Quality Control Summary

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Reported: 12/12/13 at 04:42 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Hexanone	75	86	32-160	13	30				
di-Isopropyl ether	105	113	59-133	7	30				
Isopropylbenzene	108	111	38-144	2	30				
p-Isopropyltoluene	108	113	29-152	4	30				
Methyl Iodide	118	123	52-139	4	30				
Methyl Tertiary Butyl Ether	100	110	55-129	8	30				
4-Methyl-2-pentanone	79	87	46-139	8	30				
Methylene Chloride	118	128	60-149	7	30				
n-Propylbenzene	114	120	39-157	4	30				
Styrene	108	113	35-134	4	30				
1,1,1,2-Tetrachloroethane	103	107	39-150	2	30				
1,1,2,2-Tetrachloroethane	101	112	40-152	9	30				
Tetrachloroethene	117	124	42-149	5	30				
Toluene	109	114	50-146	3	30				
1,2,3-Trichlorobenzene	88	99	10-140	11	30				
1,2,4-Trichlorobenzene	88	96	10-136	8	30				
1,1,1-Trichloroethane	125	129	52-146	3	30				
1,1,2-Trichloroethane	109	115	47-161	4	30				
Trichloroethene	110	116	53-144	4	30				
Trichlorofluoromethane	125	130	47-163	3	30				
1,2,3-Trichloropropane	103	111	36-180	7	30				
1,2,4-Trimethylbenzene	109	115	37-149	4	30				
1,3,5-Trimethylbenzene	109	112	38-150	2	30				
Vinyl Acetate	110	83	21-139	30	30				
Vinyl Chloride	121	129	50-154	6	30				
m+p-Xylene	110	113	44-137	2	30				
o-Xylene	104	107	42-137	2	30				
Batch number: E133272AA	Sample number(s): 7284478 UNSPK: P283252								
1,4-Dioxane	102	103	73-138	1	30				
Batch number: E133291AA	Sample number(s): 7284466-7284467 UNSPK: P279108								
1,4-Dioxane	82	89	70-130	3	30				
Batch number: 13330SLE026	Sample number(s): 7284465-7284473,7284475-7284477 UNSPK: 7284471								
Acenaphthene	102	103	48-127	0	30				
Acenaphthylene	90	93	49-121	2	30				
Anthracene	96	99	52-126	1	30				
Benzo(a)anthracene	99	103	44-143	3	30				
Benzo(a)pyrene	99	100	44-140	0	30				
Benzo(b)fluoranthene	138	151*	26-142	8	30				
Benzo(e)pyrene	88	93	70-130	5	30				
Benzo(g,h,i)perylene	61	61	33-141	0	30				
Benzo(k)fluoranthene	104	359*	54-142	110*	30				
Butylbenzylphthalate	108	149	49-151	31*	30				
Di-n-butylphthalate	95	104	52-147	9	30				
Chrysene	105	109	29-148	2	30				
Dibenz(a,h)anthracene	71	73	20-137	2	30				
Diethylphthalate	98	98	43-145	1	30				
Dimethylphthalate	93	92	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	117	140	39-167	17	30				
Fluoranthene	85	90	40-148	5	30				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Fluorene	97	94	51-137	4	30						
Indeno(1,2,3-cd)pyrene	68	70	17-136	3	30						
1-Methylnaphthalene	101	102	50-131	0	30						
2-Methylnaphthalene	98	100	35-152	1	30						
Naphthalene	97	97	31-148	0	30						
N-Nitrosodimethylamine	97	76	48-113	25	30						
Di-n-octylphthalate	108	118	52-162	8	30						
Phenanthrene	97	104	29-142	6	30						
Pyrene	116	111	26-143	5	30						
Batch number: 13329B16A	Sample number(s): 7284466-7284468,7284470,7284476 UNSPK: P280198										
11a TPH by EPA 8015B GRO	89	89	69-123	7	30						
Batch number: 133270022A	Sample number(s): 7284471-7284473,7284475-7284476 UNSPK: 7284471										
Aldrin	97	97	16-126	1	50						
Alpha BHC	97	91	14-140	7	50						
Beta BHC	104	102	42-133	3	50						
Gamma BHC - Lindane	95	93	30-137	4	50						
p,p-DDD	130	111	43-149	18	50						
p,p-DDE	1836*	1622*	35-152	13	50						
p,p-DDT	1799*	644*	12-193	85*	50						
Delta BHC	106	102	13-153	5	50						
Dieldrin	140	121	41-153	16	50						
Endosulfan I	94	87	26-146	9	50						
Endosulfan II	102	63	34-141	49	50						
Endosulfan Sulfate	101	102	10-181	0	50						
Endrin	100	96	30-152	6	50						
Endrin Aldehyde	108	74	23-138	39	50						
Endrin Ketone	92	92	30-148	1	50						
Heptachlor	96	93	16-152	4	50						
Heptachlor Epoxide	108	102	33-144	7	50						
Methoxychlor	97	96	41-161	2	50						
Batch number: 133300012A	Sample number(s): 7284465-7284473,7284475-7284477 UNSPK: 7284471										
PCB-1016	77	85	41-135	10	50						
PCB-1260	73	89	40-134	20	50						
Batch number: 133320015A	Sample number(s): 7284465-7284473,7284475-7284477 UNSPK: 7284471										
EFH (C12-C14)	111	100	49-123	10	20						
EFH (C15-C20)	135*	130*	49-123	4	20						
EFH (C21-C30)	409*	227*	49-123	53*	20						
EFH (C30-C40)	882*	305*	49-123	89*	20						
EFH (C8-C11)	94	86	49-123	8	20						
Batch number: 133360637002	Sample number(s): 7284465-7284477 UNSPK: 7284471 BKG: 7284471										
Aluminum	1850 (2)	2046 (2)	75-125	2	20	15,600		15,000		4	20
Antimony	59*	60*	75-125	2	20	3.96	U	3.96	U	0 (1)	20
Arsenic	98	100	75-125	1	20	4.73		4.53		4 (1)	20
Barium	99	98	75-125	1	20	95.7		87.6		9	20
Beryllium	99	99	75-125	0	20	0.610	J	0.568	J	7 (1)	20
Boron	99	98	75-125	1	20	4.26	J	4.01	J	6 (1)	20

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Cadmium	98	97	75-125	1	20	0.296 J	0.256 J	14 (1)	20
Calcium	111 (2)	126 (2)	75-125	3	20	1,840	1,730	6	20
Chromium	109	107	75-125	1	20	18.5	17.6	5	20
Cobalt	98	97	75-125	1	20	5.43	4.79	13 (1)	20
Copper	105	105	75-125	0	20	8.13	7.57	7 (1)	20
Iron	-69 (2)	417 (2)	75-125	2	20	19,400	18,100	7	20
Lead	116	102	75-125	9	20	6.78	6.26	8 (1)	20
Lithium	102	103	75-125	1	20	19.1	17.9	6 (1)	20
Magnesium	95 (2)	111 (2)	75-125	1	20	3,800	3,510	8	20
Manganese	104 (2)	46 (2)	75-125	9	20	300	256	16	20
Molybdenum	99	99	75-125	1	20	0.597 J	0.409 J	37* (1)	20
Nickel	99	98	75-125	0	20	8.57	8.06	6 (1)	20
Phosphorus	94	99	75-125	2	20	221	202	9	20
Potassium	100	96	75-125	1	20	2,640	2,330	13	20
Sodium	97	97	75-125	0	20	68.5 J	65.8 J	4 (1)	20
Tin	91	90	75-125	1	20	2.64 J	2.46 J	7 (1)	20
Titanium	146 (2)	174 (2)	75-125	2	20	1,070	973	9	20
Vanadium	104	102	75-125	1	20	35.1	32.8	7	20
Zinc	99	100	75-125	1	20	49.6	45.5	9	20
Zirconium	97	96	75-125	1	20	1.90 J	2.56 J	29* (1)	20
Batch number: 133360637002A	Sample number(s): 7284465-7284477 UNSPK: 7284471 BKG: 7284471								
Silver	100	102	75-125	2	20	0.0998 J	0.125 J	22* (1)	20
Strontium	94	131*	75-125	11	20	17.9	16.1	10	20
Thallium	91	102	75-125	6	20	0.269	0.234	14 (1)	20
Batch number: 133360637002B	Sample number(s): 7284465-7284477 UNSPK: 7284471 BKG: 7284471								
Selenium	88	87	75-125	1	20	0.396 U	0.396 U	0 (1)	20
Batch number: 133360638002	Sample number(s): 7284465-7284477 UNSPK: 7284471 BKG: 7284471								
3a Mercury 7471A	108	104	65-135	3	20	0.0109 J	0.0125 J	14 (1)	20
Batch number: 13330243201A	Sample number(s): 7284469-7284470 UNSPK: P280198 BKG: P280198								
2a Chromium VI by EPA 7199	117		75-125			0.40 U	0.63	200* (1)	20
Batch number: 13325003101A	Sample number(s): 7284478 BKG: P284645								
28b pH (9040B and 9040C)						9.2	9.2	0	3
Batch number: 13325039401A	Sample number(s): 7284465-7284471,7284474-7284477 BKG: 7284471								
15a pH by 9045D						6.81	6.84	0	3
Batch number: 13331162401A	Sample number(s): 7284465-7284477 BKG: 7284471								
14a Moisture Content by 160.3						3.8	3.9	5	20
14a Moisture Content by 160.3						3.8	3.9	5	20
14a Moisture Content by 160.3						3.8	3.9	5	20
Batch number: 13338003	Sample number(s): 7284465-7284473,7284475-7284477 UNSPK: 7284471								
2378-TCDD	101	94	40-135	7	20				
12378-PeCDD	102	96	40-135	5	20				
123478-HxCDD	104	102	40-135	1	20				
123678-HxCDD	115	103	40-135	10	20				
123789-HxCDD	104	101	40-135	2	20				

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Quality Control Summary

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Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1234678-HpCDD	214*	143*	40-135	38*	20				
OCDD	785*	357*	40-135	72*	20				
2378-TCDF	102	102	40-135	1	20				
12378-PeCDF	105	104	40-135	0	20				
23478-PeCDF	104	104	40-135	1	20				
123478-HxCDF	105	104	40-135	0	20				
123678-HxCDF	106	104	40-135	0	20				
123789-HxCDF	105	105	40-135	2	20				
234678-HxCDF	106	104	40-135	1	20				
1234678-HpCDF	128	114	40-135	10	20				
1234789-HpCDF	107	105	40-135	0	20				
OCDF	146*	120	40-135	18	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 12a Volatile Organics EPA8260B
Batch number: B133252AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7284466	104	104	100	91
7284467	106	107	100	94
Blank	105	104	97	93
LCS	100	100	101	107
MS	100	95	102	103
MSD	101	100	101	102
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 13b 1,4-Dioxane by 8260B SIM
Batch number: E133272AA

	Toluene-d8
7284478	96
Blank	97
LCS	97
MS	97
MSD	97
Limits:	80-120

Analysis Name: 13a 1,4-Dioxane by 8260B SIM
Batch number: E133291AA

	Toluene-d8
7284466	44*
7284467	42*

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Quality Control Summary

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Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

Blank	101
LCS	101
LCSD	102
MS	43*
MSD	44*
Limits:	70-130

Analysis Name: 12b Volatile Organics EPA8260B
Batch number: Y133301AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7284478	100	102	101	95
Blank	100	102	100	95
LCS	99	105	103	100
LCSD	99	104	103	100
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13330SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7284465	64	83	95
7284466	79	87	101
7284467	65	81	93
7284468	79	91	98
7284469	74	80	98
7284470	81	81	98
7284471	77	85	94
7284472	74	84	97
7284473	72	85	97
7284475	70	79	96
7284476	67	83	95
7284477	78	93	97
Blank	84	87	97
LCS	79	83	94
MS	74	84	97
MSD	72	85	97
Limits:	54-129	59-125	61-125

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13330WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7284478	98	97	92
Blank	102	104	103
LCS	101	104	104
LCSD	96	100	98
Limits:	44-137	62-141	51-136

Analysis Name: 11b TPH by EPA 8015B GRO

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

Batch number: 13325A94A

	Trifluorotoluene-F
7284464	88
7284478	90
Blank	85
LCS	92
LCSD	90
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13329B16A

	Trifluorotoluene-F
7284466	102
7284467	96
7284468	92
7284470	98
7284476	121
Blank	121
LCS	108
MS	98
MSD	94
Limits:	50-142

Analysis Name: 19b Formaldehyde 8315A
Batch number: 133250022A

	Butyraldehyde
7284478	95
Blank	90
LCS	88
LCSD	88
Limits:	36-155

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133270022A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7284471	88	96
7284472	94	95
7284473	99	105
7284475	85	96
7284476	75	94
Blank	102	121*
LCS	96	114
MS	94	95
MSD	99	105
Limits:	50-130	20-120

Analysis Name: 24b Herbicides by EPA 8151A
Batch number: 133270036A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

	2,4-Dichlorophenylacetic acid
7284478	80
Blank	79
LCS	96
LCSD	85
Limits:	50-150

Analysis Name: 22b Pesticides by EPA 8081B
Batch number: 133290006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7284478	70	70
Blank	94	95
LCS	88	95
LCSD	94	75
Limits:	60-140	20-120

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133290007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7284478	84	75
Blank	79	74
LCS	120	64
LCSD	107	82
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133300012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7284465	105	99
7284466	100	99
7284467	103	96
7284468	110	104
7284469	103	94
7284470	86	82
7284471	114	101
7284472	86	72
7284473	102	95
7284475	107	97
7284476	109	102
7284477	110	103
Blank	100	103
LCS	100	106
LCSD	114	111
MS	86	72
MSD	102	95
Limits:	45-120	45-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133260024A

	Chlorobenzene	Orthoterphenyl
7284478	104	86
Blank	124	105
LCS	100	90
LCSD	98	87
Limits:	45-126	69-119

Analysis Name: 23b Terphenyls by 8015B
Batch number: 133270034A

	n-Triacontane-d62
7284478	103
Blank	100
LCS	110
LCSD	107
Limits:	36-160

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133320015A

	Chlorobenzene	Orthoterphenyl
7284465	108	104
7284466	114	104
7284467	117	102
7284468	110	100
7284469	109	105
7284470	113	83
7284471	108	103
7284472	118	96
7284473	108	89
7284475	108	102
7284476	113	107
7284477	108	104
Blank	117	113
LCS	113	108
MS	118	96
MSD	108	89
Limits:	37-125	66-123

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13330001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7284478	58	54	65	64	65	60
Blank	68	58	72	72	73	67
OPR	67	66	78	81	79	76
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

7284478	56	50	45	52	62	61
Blank	57	50	38	53	65	66
OPR	69	62	55	61	74	73
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7284478	61	52	45	59	55
Blank	65	49	36	69	64
OPR	72	62	52	67	66
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13338003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7284465	70	80	81	83	84	103
7284466	77	78	86	86	86	104
7284467	61	72	77	78	80	97
7284468	63	74	82	83	84	94
7284469	70	81	81	81	83	90
7284470	62	62	70	69	70	71
7284471	55	60	70	71	73	73
7284472	81	91	85	85	85	98
7284473	74	66	76	77	78	81
7284475	62	57	67	67	66	71
7284476	48	51	60	61	61	65
7284477	52	54	65	66	66	68
Blank	59	70	75	78	79	87
MS	81	91	85	85	85	98
MSD	74	66	76	77	78	81
OPR	57	68	74	76	78	86
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7284465	100	99	106	79	85	84
7284466	100	97	101	77	90	98
7284467	97	95	102	71	82	86
7284468	103	99	108	73	85	93
7284469	94	94	108	78	82	84
7284470	73	73	75	62	74	72
7284471	80	76	77	62	76	78
7284472	97	99	114	87	87	89
7284473	73	64	59	69	81	82
7284475	74	70	72	60	74	73
7284476	71	69	73	52	67	67
7284477	76	69	72	57	72	72
Blank	93	89	94	69	79	78
MS	97	99	114	87	87	89
MSD	73	64	59	69	81	82
OPR	95	88	100	67	79	78

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1435253
Reported: 12/12/13 at 04:42 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7284465	85	98	110	62	77	
7284466	91	96	103	66	75	
7284467	85	95	106	55	67	
7284468	91	101	113	60	70	
7284469	85	96	112	66	77	
7284470	73	77	80	58	60	
7284471	77	81	86	51	58	
7284472	95	100	119	75	89	
7284473	81	69	64	64	67	
7284475	76	78	80	55	58	
7284476	69	75	85	43	48	
7284477	73	77	81	45	52	
Blank	80	90	98	56	67	
MS	95	100	119	75	89	
MSD	81	69	64	64	67	
OPR	79	91	108	53	64	
Limits:	28-130	23-140	17-157	24-169	24-185	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1435253 7284464-78

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/19/2013
CarrierName: FedEx
AirbillNo: 7971 9966 9043

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131119-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
TB-111913	11/19/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X											
SL-518-SA5A-SB-0.0-0.5	11/19/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-518-SA5A-SB-0.0-0.5	11/19/13 08:45	SO	None	1 - 4 oz glass	10 day													X																		
SL-518-SA5A-SB-7.0-8.0	11/19/13 08:55	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-518-SA5A-SB-7.0-8.0	11/19/13 08:55	SO	None	6 - Encore	10 day																		X	X	X											
SL-518-SA5A-SB-10.0-11.0	11/19/13 09:17	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-518-SA5A-SB-10.0-11.0	11/19/13 09:17	SO	None	6 - Encore	10 day																		X	X	X											
SL-518-SA5A-SB-15.0-16.0	11/19/13 10:03	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X										
SL-518-SA5A-SB-15.0-16.0	11/19/13 10:03	SO	None	2 - Encore	10 day																				X											
SL-596-SA5A-SB-0.0-0.5	11/19/13 11:35	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X										
SL-596-SA5A-SB-0.0-0.5	11/19/13 11:35	SO	None	2 - 4 oz glass	10 day													X		X																
SL-596-SA5A-SB-4.0-5.0	11/19/13 11:43	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X		X						X										
SL-596-SA5A-SB-4.0-5.0	11/19/13 11:43	SO	None	2 - Encore	10 day																				X											
SL-708-SA5A-SB-4.0-5.0	11/19/13 14:24	SO	None	2 - Encore	10 day																				X											

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/19/13	1400 1600									
										11.20.13	1010

13013 1435253 7284464-78

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/19/2013
CarrierName: FedEx
AirbillNo: 7971 9966 9043

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131119-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
SL-708-SA5A-SB-0.0-0.5MS	11/19/13 14:15	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X	X						X				X										
SL-708-SA5A-SB-0.0-0.5MS	11/19/13 14:15	SO	None	3 - 4 oz glass	10 day													X																		
SL-1008-SA5A-SB-0.0-0.5	11/19/13 14:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X	X						X				X										
SL-1008-SA5A-SB-0.0-0.5	11/19/13 14:10	SO	None	1 - 4 oz glass	10 day													X																		
SL-708-SA5A-SB-4.0-5.0	11/19/13 14:24	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X	X		X				X				X										
SL-732-SA5A-SB-0.0-0.5	11/19/13 13:38	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X	X										X										
SL-732-SA5A-SB-0.0-0.5	11/19/13 13:38	SO	None	1 - 4 oz glass	10 day													X																		

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/19/13	1600 1600							Bueneh Ben	11.20.13	1010

13013 1435253 7284464-78

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/19/2013
CarrierName: FedEx
AirbillNo: 8017 8586 9917

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131119-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Other Analysis/Notes
EB-111913	11/19/13 15:00	WQ	HCl	9 - 40 mL Vial	10 day																		X	X	X											
EB-111913	11/19/13 15:00	WQ	None	5 - 250 mL Poly	10 day						X	X			X							X										X				Analyze TIC for morpoline only, please.
EB-111913	11/19/13 15:00	WQ	HCl	3 - 1 L Amber	10 day																					X			X							
EB-111913	11/19/13 15:00	WQ	None	3 - 1 L Amber	10 day									X							X															
EB-111913	11/19/13 15:00	WQ	None	3 - 250 mL Poly	10 day	X		X											X	X																

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/19/13	1510									
									Suremey Berry	11/20/13	1010

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Environmental Sample Administration Receipt Documentation Log

1435253

Client/Project: CDM

Date of Receipt: 11/20/13

Time of Receipt: 1010

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D146	0.9	TB	WI	Y	B	
2	↓	1.5	↓	↓	↓	↓	
3	↓	0.8	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Rec 8 ~~Ea~~ Encores for SL-518-SA5A-SB 7.0-8.0 & 10.0-11.0

Unpacker Signature/Emp#: Brenely Bauely 2299 **Date/Time:** 11.20.13 1101

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/23/2013
Group Number: 1436294
SDG: PH133
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-673-SA5A-SB-0.0-0.5 Soil	7290754
SL-673-SA5A-SB-4.0-5.0 Soil	7290755
SL-673-SA5A-SB-10.5-11.5 Soil	7290756
TB-112213 Water	7290757
SL-676-SA5A-SB-0.0-0.5 Soil	7290758
SL-676-SA5A-SB-4.0-5.0 Soil	7290759
SL-686-SA5A-SB-0.0-0.5 Soil	7290760
SL-686-SA5A-SB-0.0-0.5MS Soil	7290761
SL-686-SA5A-SB-0.0-0.5MSD Soil	7290762
SL-686-SA5A-SB-0.0-0.5DUP Soil	7290763
SL-986-SA5A-SB-0.0-0.5 Soil	7290764

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	8.5	U	8.5	3.4	5
12969	Acenaphthylene	208-96-8	8.5	U	8.5	1.7	5
12969	Anthracene	120-12-7	2.4	J	8.5	1.7	5
12969	Benzo(a)anthracene	56-55-3	7.2	J	8.5	3.4	5
12969	Benzo(a)pyrene	50-32-8	8.6		8.5	3.4	5
12969	Benzo(b)fluoranthene	205-99-2	21		8.5	3.4	5
12969	Benzo(e)pyrene	192-97-2	87	U	87	17	5
12969	Benzo(g,h,i)perylene	191-24-2	5.9	J	8.5	3.4	5
12969	Benzo(k)fluoranthene	207-08-9	5.4	J	8.5	3.4	5
12969	Butylbenzylphthalate	85-68-7	92	U	92	31	5
12969	Di-n-butylphthalate	84-74-2	92	U	92	31	5
12969	Chrysene	218-01-9	21		8.5	1.7	5
12969	Dibenz(a,h)anthracene	53-70-3	8.5	U	8.5	3.4	5
12969	Diethylphthalate	84-66-2	92	U	92	31	5
12969	Dimethylphthalate	131-11-3	92	U	92	31	5
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	92	U	92	31	5
12969	Fluoranthene	206-44-0	19		8.5	3.4	5
12969	Fluorene	86-73-7	8.5	U	8.5	3.4	5
12969	Indeno(1,2,3-cd)pyrene	193-39-5	3.7	J	8.5	3.4	5
12969	1-Methylnaphthalene	90-12-0	13		8.5	3.4	5
12969	2-Methylnaphthalene	91-57-6	16		8.5	3.4	5
12969	Naphthalene	91-20-3	8.5		8.5	3.4	5
12969	N-Nitrosodimethylamine	62-75-9	8.5	U	8.5	3.4	5
12969	Di-n-octylphthalate	117-84-0	92	U	92	31	5
12969	Phenanthrene	85-01-8	23		8.5	3.4	5
12969	Pyrene	129-00-0	17		8.5	3.4	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	16	J	33	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	7.8		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	26		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		40.1	7.23	1
06944	Antimony	7440-36-0	4.01	U	4.01	0.742	1
06935	Arsenic	7440-38-2	5.40		4.01	0.702	1
06946	Barium	7440-39-3	96.2		1.00	0.0331	1
06947	Beryllium	7440-41-7	0.616	J	1.00	0.0672	1
07914	Boron	7440-42-8	4.55	J	10.0	0.842	1
06949	Cadmium	7440-43-9	1.00	U	1.00	0.0762	1
01650	Calcium	7440-70-2	2,800		20.0	3.35	1
06951	Chromium	7440-47-3	19.8		3.01	0.160	1
06952	Cobalt	7440-48-4	6.25		1.00	0.0992	1
06953	Copper	7440-50-8	15.0		2.00	0.291	1
01654	Iron	7439-89-6	22,200		40.1	3.63	1
06955	Lead	7439-92-1	13.5		3.01	0.501	1
01656	Lithium	7439-93-2	20.0		4.0	0.34	1
01657	Magnesium	7439-95-4	4,260		10.0	1.67	1
06958	Manganese	7439-96-5	358		1.00	0.0832	1
06960	Molybdenum	7439-98-7	0.495	J	2.00	0.170	1
06961	Nickel	7440-02-0	13.1		2.00	0.130	1
10145	Phosphorus	7723-14-0	428		10.0	2.90	1
01662	Potassium	7440-09-7	3,500		100	8.36	1
01667	Sodium	7440-23-5	110		100	16.7	1
06969	Tin	7440-31-5	3.15	J	10.0	0.221	1
06970	Titanium	7440-32-6	1,110		1.00	0.170	1
06971	Vanadium	7440-62-2	39.5		1.00	0.130	1
06972	Zinc	7440-66-6	68.8		4.01	0.200	1
10146	Zirconium	7440-67-7	2.66	J	5.01	0.842	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.159	J	0.401	0.100	2
06142	Silver	7440-22-4	0.0874	J	0.200	0.0261	2
06144	Strontium	7440-24-6	20.4		0.401	0.0682	2
06145	Thallium	7440-28-0	0.251		0.200	0.0301	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0175		0.0164	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 18.7 C.	n.a.	7.52		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.183	JQ	1.01	0.0637	1
11031	12378-PeCDD	40321-76-4	1.43	JBQ	5.05	0.0947	1
11031	123478-HxCDD	39227-28-6	2.47	J	5.05	0.0925	1
11031	123678-HxCDD	57653-85-7	5.25	B	5.05	0.0981	1
11031	123789-HxCDD	19408-74-3	4.24	J	5.05	0.0943	1
11031	1234678-HpCDD	35822-46-9	176	B	5.05	0.194	1
11031	OCDD	3268-87-9	3,570	B	10.1	0.239	1
11031	2378-TCDF	51207-31-9	0.475	J	1.01	0.0888	1
11031	12378-PeCDF	57117-41-6	1.18	JB	5.05	0.0545	1
11031	23478-PeCDF	57117-31-4	1.50	JB	5.05	0.0537	1
11031	123478-HxCDF	70648-26-9	2.18	JB	5.05	0.0752	1
11031	123678-HxCDF	57117-44-9	1.40	J	5.05	0.0725	1
11031	123789-HxCDF	72918-21-9	1.53	J	5.05	0.0862	1
11031	234678-HxCDF	60851-34-5	1.61	J	5.05	0.0718	1
11031	1234678-HpCDF	67562-39-4	34.3	B	5.05	0.0729	1
11031	1234789-HpCDF	55673-89-7	1.69	JBQ	5.05	0.0937	1
11031	OCDF	39001-02-0	67.9	B	10.1	0.133	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	5.59				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	56	23 - 140
13C12-OCDD	39	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	54	24 - 185
13C12-23478-PeCDF	53	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	56	28 - 143
13C12-1234789-HpCDF	49	26 - 138
13C12-OCDF	35	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 10:18	Mark A Clark	5
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/03/2013 23:33	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/05/2013 00:01	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 05:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:40	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:41	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:41	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:41	John P Hook	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290754
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:33

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67300 SDG#: PH133-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:41	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	8.9	U	8.9	3.6	5
12969	Acenaphthylene	208-96-8	8.9	U	8.9	1.8	5
12969	Anthracene	120-12-7	8.9	U	8.9	1.8	5
12969	Benzo(a)anthracene	56-55-3	4.5	J	8.9	3.6	5
12969	Benzo(a)pyrene	50-32-8	3.9	J	8.9	3.6	5
12969	Benzo(b)fluoranthene	205-99-2	9.0		8.9	3.6	5
12969	Benzo(e)pyrene	192-97-2	91	U	91	18	5
12969	Benzo(g,h,i)perylene	191-24-2	8.9	U	8.9	3.6	5
12969	Benzo(k)fluoranthene	207-08-9	8.9	U	8.9	3.6	5
12969	Butylbenzylphthalate	85-68-7	97	U	97	32	5
12969	Di-n-butylphthalate	84-74-2	97	U	97	32	5
12969	Chrysene	218-01-9	9.8		8.9	1.8	5
12969	Dibenz(a,h)anthracene	53-70-3	8.9	U	8.9	3.6	5
12969	Diethylphthalate	84-66-2	97	U	97	32	5
12969	Dimethylphthalate	131-11-3	97	U	97	32	5
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	97	U	97	32	5
12969	Fluoranthene	206-44-0	12		8.9	3.6	5
12969	Fluorene	86-73-7	8.9	U	8.9	3.6	5
12969	Indeno(1,2,3-cd)pyrene	193-39-5	8.9	U	8.9	3.6	5
12969	1-Methylnaphthalene	90-12-0	6.3	J	8.9	3.6	5
12969	2-Methylnaphthalene	91-57-6	8.4	J	8.9	3.6	5
12969	Naphthalene	91-20-3	4.6	J	8.9	3.6	5
12969	N-Nitrosodimethylamine	62-75-9	8.9	U	8.9	3.6	5
12969	Di-n-octylphthalate	117-84-0	97	U	97	32	5
12969	Phenanthrene	85-01-8	13		8.9	3.6	5
12969	Pyrene	129-00-0	12		8.9	3.6	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.5	J	1.1	0.2	26.54
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C21-C30)	n.a.	7.0		5.4	2.1	1
12952	EFH (C30-C40)	n.a.	25		11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,400		42.5	7.66	1
06944	Antimony	7440-36-0	4.25	U	4.25	0.786	1
06935	Arsenic	7440-38-2	5.90		4.25	0.744	1
06946	Barium	7440-39-3	97.2		1.06	0.0351	1
06947	Beryllium	7440-41-7	0.674	J	1.06	0.0712	1
07914	Boron	7440-42-8	4.38	J	10.6	0.892	1
06949	Cadmium	7440-43-9	1.06	U	1.06	0.0807	1
01650	Calcium	7440-70-2	2,480		21.2	3.55	1
06951	Chromium	7440-47-3	22.0		3.19	0.170	1
06952	Cobalt	7440-48-4	5.32		1.06	0.105	1
06953	Copper	7440-50-8	15.0		2.12	0.308	1
01654	Iron	7439-89-6	23,800		42.5	3.85	1
06955	Lead	7439-92-1	9.56		3.19	0.531	1
01656	Lithium	7439-93-2	25.2		4.2	0.36	1
01657	Magnesium	7439-95-4	4,560		10.6	1.77	1
06958	Manganese	7439-96-5	277		1.06	0.0882	1
06960	Molybdenum	7439-98-7	0.593	J	2.12	0.181	1
06961	Nickel	7440-02-0	12.0		2.12	0.138	1
10145	Phosphorus	7723-14-0	267		10.6	3.07	1
01662	Potassium	7440-09-7	2,650		106	8.86	1
01667	Sodium	7440-23-5	102	J	106	17.7	1
06969	Tin	7440-31-5	3.52	J	10.6	0.234	1
06970	Titanium	7440-32-6	1,290		1.06	0.181	1
06971	Vanadium	7440-62-2	41.3		1.06	0.138	1
06972	Zinc	7440-66-6	58.1		4.25	0.212	1
10146	Zirconium	7440-67-7	2.74	J	5.31	0.892	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.125	J	0.425	0.106	2
06142	Silver	7440-22-4	0.0846	J	0.212	0.0276	2
06144	Strontium	7440-24-6	21.7		0.425	0.0722	2
06145	Thallium	7440-28-0	0.249		0.212	0.0319	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0141	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.75		0.0100	0.0100	1
	The pH was measured in water at 19 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	6.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0556	1
11031	12378-PeCDD	40321-76-4	0.448	JB	5.19	0.0607	1
11031	123478-HxCDD	39227-28-6	0.770	J	5.19	0.0892	1
11031	123678-HxCDD	57653-85-7	1.80	JB	5.19	0.0917	1
11031	123789-HxCDD	19408-74-3	1.24	JQ	5.19	0.0883	1
11031	1234678-HpCDD	35822-46-9	65.5	B	5.19	0.138	1
11031	OCDD	3268-87-9	1,420	B	10.4	0.186	1
11031	2378-TCDF	51207-31-9	0.192	J	1.04	0.0697	1
11031	12378-PeCDF	57117-41-6	0.525	JBQ	5.19	0.0412	1
11031	23478-PeCDF	57117-31-4	0.619	JB	5.19	0.0396	1
11031	123478-HxCDF	70648-26-9	0.715	JB	5.19	0.0680	1
11031	123678-HxCDF	57117-44-9	0.444	J	5.19	0.0631	1
11031	123789-HxCDF	72918-21-9	0.559	J	5.19	0.0700	1
11031	234678-HxCDF	60851-34-5	0.608	J	5.19	0.0681	1
11031	1234678-HpCDF	67562-39-4	10.8	B	5.19	0.0465	1
11031	1234789-HpCDF	55673-89-7	0.550	JB	5.19	0.0646	1
11031	OCDF	39001-02-0	19.8	B	10.4	0.0941	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.34				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	61	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	44	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	59	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	40	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 10:52	Mark A Clark	5
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16B	11/27/2013 10:44	Marie D Beamenderfer	26.54
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332733245	11/23/2013 18:59	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332733245	11/23/2013 18:59	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/03/2013 23:51	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/05/2013 00:23	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 05:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290755
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:15

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67345 SDG#: PH133-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:44	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:44	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:44	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:44	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:44	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.9	U	1.9	0.76	1
12969	Acenaphthylene	208-96-8	1.9	U	1.9	0.38	1
12969	Anthracene	120-12-7	1.9	U	1.9	0.38	1
12969	Benzo(a)anthracene	56-55-3	1.9	U	1.9	0.76	1
12969	Benzo(a)pyrene	50-32-8	1.9	U	1.9	0.76	1
12969	Benzo(b)fluoranthene	205-99-2	1.9	U	1.9	0.76	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.8	1
12969	Benzo(g,h,i)perylene	191-24-2	1.9	U	1.9	0.76	1
12969	Benzo(k)fluoranthene	207-08-9	1.9	U	1.9	0.76	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.8	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.8	1
12969	Chrysene	218-01-9	1.9	U	1.9	0.38	1
12969	Dibenz(a,h)anthracene	53-70-3	1.9	U	1.9	0.76	1
12969	Diethylphthalate	84-66-2	20	U	20	6.8	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.8	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.8	1
12969	Fluoranthene	206-44-0	1.9	U	1.9	0.76	1
12969	Fluorene	86-73-7	1.9	U	1.9	0.76	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.9	U	1.9	0.76	1
12969	1-Methylnaphthalene	90-12-0	1.9	U	1.9	0.76	1
12969	2-Methylnaphthalene	91-57-6	1.9	U	1.9	0.76	1
12969	Naphthalene	91-20-3	1.9	U	1.9	0.76	1
12969	N-Nitrosodimethylamine	62-75-9	1.9	U	1.9	0.76	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.8	1
12969	Phenanthrene	85-01-8	1.9	U	1.9	0.76	1
12969	Pyrene	129-00-0	1.9	U	1.9	0.76	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	23.41
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	37	U	37	11	1
13099	Aroclor 5442	12642-23-8	37	U	37	11	1
13099	Aroclor 5460	11126-42-4	37	U	37	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.7	1
13099	PCB-1221	11104-28-2	19	U	19	5.8	1
13099	PCB-1232	11141-16-5	19	U	19	4.6	1
13099	PCB-1242	53469-21-9	19	U	19	4.6	1
13099	PCB-1248	12672-29-6	19	U	19	3.7	1
13099	PCB-1254	11097-69-1	19	U	19	5.0	1
13099	PCB-1260	11096-82-5	19	U	19	4.4	1
13099	PCB-1262	37324-23-5	19	U	19	3.7	1
13099	PCB-1268	11100-14-4	19	U	19	3.7	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C15-C20)	n.a.	5.7	U	5.7	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.7	U	5.7	2.3	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.5	1
12952	EFH (C8-C11)	n.a.	5.7	U	5.7	2.3	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		44.4	8.01	1
06944	Antimony	7440-36-0	4.44	U	4.44	0.822	1
06935	Arsenic	7440-38-2	16.2		4.44	0.777	1
06946	Barium	7440-39-3	69.9		1.11	0.0366	1
06947	Beryllium	7440-41-7	1.29		1.11	0.0744	1
07914	Boron	7440-42-8	3.55	J	11.1	0.933	1
06949	Cadmium	7440-43-9	1.11	U	1.11	0.0844	1
01650	Calcium	7440-70-2	2,240		22.2	3.71	1
06951	Chromium	7440-47-3	29.5		3.33	0.178	1
06952	Cobalt	7440-48-4	4.08		1.11	0.110	1
06953	Copper	7440-50-8	21.6		2.22	0.322	1
01654	Iron	7439-89-6	41,100		222	20.1	5
06955	Lead	7439-92-1	13.6		3.33	0.555	1
01656	Lithium	7439-93-2	26.3		4.4	0.38	1
01657	Magnesium	7439-95-4	4,620		11.1	1.85	1
06958	Manganese	7439-96-5	228		1.11	0.0922	1
06960	Molybdenum	7439-98-7	0.640	J	2.22	0.189	1
06961	Nickel	7440-02-0	11.0		2.22	0.144	1
10145	Phosphorus	7723-14-0	399		11.1	3.21	1
01662	Potassium	7440-09-7	1,850		111	9.26	1
01667	Sodium	7440-23-5	111	J	111	18.5	1
06969	Tin	7440-31-5	4.15	J	11.1	0.244	1
06970	Titanium	7440-32-6	1,230		1.11	0.189	1
06971	Vanadium	7440-62-2	70.7		1.11	0.144	1
06972	Zinc	7440-66-6	45.1		4.44	0.222	1
10146	Zirconium	7440-67-7	2.19	J	5.55	0.933	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.184	J	0.444	0.111	2
06142	Silver	7440-22-4	0.0484	J	0.222	0.0289	2
06144	Strontium	7440-24-6	22.7		0.444	0.0755	2
06145	Thallium	7440-28-0	0.249		0.222	0.0333	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0188	U	0.0188	0.0113	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.50		0.0100	0.0100	1
	The pH was measured in water at 18.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	11.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0709	JQ	1.09	0.0583	1
11031	12378-PeCDD	40321-76-4	5.46	U	5.46	0.0454	1
11031	123478-HxCDD	39227-28-6	5.46	U	5.46	0.0306	1
11031	123678-HxCDD	57653-85-7	5.46	U	5.46	0.0322	1
11031	123789-HxCDD	19408-74-3	0.0727	J	5.46	0.0314	1
11031	1234678-HpCDD	35822-46-9	0.139	JB	5.46	0.0429	1
11031	OCDD	3268-87-9	0.677	JB	10.9	0.0496	1
11031	2378-TCDF	51207-31-9	0.0986	JQ	1.09	0.0666	1
11031	12378-PeCDF	57117-41-6	0.0765	JBQ	5.46	0.0293	1
11031	23478-PeCDF	57117-31-4	0.0405	JB	5.46	0.0310	1
11031	123478-HxCDF	70648-26-9	0.0400	JBQ	5.46	0.0314	1
11031	123678-HxCDF	57117-44-9	0.0448	JQ	5.46	0.0296	1
11031	123789-HxCDF	72918-21-9	0.0728	JQ	5.46	0.0373	1
11031	234678-HxCDF	60851-34-5	0.0312	J	5.46	0.0307	1
11031	1234678-HpCDF	67562-39-4	0.0656	JBQ	5.46	0.0179	1
11031	1234789-HpCDF	55673-89-7	0.0902	JBQ	5.46	0.0290	1
11031	OCDF	39001-02-0	0.295	JBQ	10.9	0.0817	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0241				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	51	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	53	23 - 140
13C12-OCDD	39	17 - 157
13C12-2378-TCDF	51	24 - 169
13C12-12378-PeCDF	53	24 - 185
13C12-23478-PeCDF	46	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	42	26 - 138
13C12-OCDF	32	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 11:25	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16B	11/27/2013 11:22	Marie D Beamenderfer	23.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332733245	11/23/2013 19:00	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332733245	11/23/2013 19:00	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 00:10	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/04/2013 22:13	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 11:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 13:37	Maria A Orrs	5
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-673-SA5A-SB-10.5-11.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290756
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 11:21

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67310 SDG#: PH133-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:55	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:51	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:51	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:51	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:51	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-112213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7290757
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 08:00

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

133TB SDG#: PH133-04TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13330A94A	11/26/2013 23:06	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13330A94A	11/26/2013 23:06	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	2.0		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	2.8		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	5.7		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	5.1	J	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.6	J	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	2.4		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	7.3		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	3.9		1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.91	J	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	0.71	J	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.2	J	1.7	0.70	1
12969	Naphthalene	91-20-3	1.1	J	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.9		1.7	0.70	1
12969	Pyrene	129-00-0	3.9		1.7	0.70	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	9.8		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	28		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		40.4	7.27	1
06944	Antimony	7440-36-0	4.04	U	4.04	0.747	1
06935	Arsenic	7440-38-2	4.96		4.04	0.706	1
06946	Barium	7440-39-3	104		1.01	0.0333	1
06947	Beryllium	7440-41-7	0.601	J	1.01	0.0676	1
07914	Boron	7440-42-8	4.55	J	10.1	0.848	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0767	1
01650	Calcium	7440-70-2	2,440		20.2	3.37	1
06951	Chromium	7440-47-3	21.7		3.03	0.161	1
06952	Cobalt	7440-48-4	6.01		1.01	0.0999	1
06953	Copper	7440-50-8	14.9		2.02	0.293	1
01654	Iron	7439-89-6	20,500		40.4	3.65	1
06955	Lead	7439-92-1	12.0		3.03	0.504	1
01656	Lithium	7439-93-2	19.5		4.0	0.34	1
01657	Magnesium	7439-95-4	3,910		10.1	1.68	1
06958	Manganese	7439-96-5	346		1.01	0.0837	1
06960	Molybdenum	7439-98-7	0.555	J	2.02	0.172	1
06961	Nickel	7440-02-0	12.9		2.02	0.131	1
10145	Phosphorus	7723-14-0	335		10.1	2.92	1
01662	Potassium	7440-09-7	3,600		101	8.41	1
01667	Sodium	7440-23-5	103		101	16.8	1
06969	Tin	7440-31-5	3.18	J	10.1	0.222	1
06970	Titanium	7440-32-6	1,180		1.01	0.172	1
06971	Vanadium	7440-62-2	36.5		1.01	0.131	1
06972	Zinc	7440-66-6	59.0		4.04	0.202	1
10146	Zirconium	7440-67-7	2.15	J	5.04	0.848	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.154	J	0.404	0.101	2
06142	Silver	7440-22-4	0.0654	J	0.202	0.0262	2
06144	Strontium	7440-24-6	20.6		0.404	0.0686	2
06145	Thallium	7440-28-0	0.271		0.202	0.0303	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0113	J	0.0171	0.0103	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19 C.	n.a.	6.89		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.181	JQ	1.03	0.0641	1
11031	12378-PeCDD	40321-76-4	1.17	JBQ	5.16	0.0773	1
11031	123478-HxCDD	39227-28-6	1.76	J	5.16	0.0587	1
11031	123678-HxCDD	57653-85-7	4.56	JB	5.16	0.0603	1
11031	123789-HxCDD	19408-74-3	3.31	J	5.16	0.0588	1
11031	1234678-HpCDD	35822-46-9	115	B	5.16	0.109	1
11031	OCDD	3268-87-9	1,160	B	10.3	0.151	1
11031	2378-TCDF	51207-31-9	0.223	JQ	1.03	0.0786	1
11031	12378-PeCDF	57117-41-6	0.428	JB	5.16	0.0417	1
11031	23478-PeCDF	57117-31-4	0.490	JB	5.16	0.0409	1
11031	123478-HxCDF	70648-26-9	0.747	JB	5.16	0.0651	1
11031	123678-HxCDF	57117-44-9	0.668	JQ	5.16	0.0584	1
11031	123789-HxCDF	72918-21-9	0.447	J	5.16	0.0633	1
11031	234678-HxCDF	60851-34-5	0.772	JQ	5.16	0.0580	1
11031	1234678-HpCDF	67562-39-4	18.2	B	5.16	0.0694	1
11031	1234789-HpCDF	55673-89-7	1.24	JB	5.16	0.0943	1
11031	OCDF	39001-02-0	61.8	B	10.3	0.0728	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.96				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	52	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	56	23 - 140
13C12-OCDD	46	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	52	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	42	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 11:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 00:28	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/05/2013 00:44	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 12:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:59	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:53	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:53	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:53	John P Hook	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290758
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:30

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67600 SDG#: PH133-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:53	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:35	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.74	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.37	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.37	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.74	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.74	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.74	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.7	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.74	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.74	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.6	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.6	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.37	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.74	1
12969	Diethylphthalate	84-66-2	20	U	20	6.6	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.6	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.6	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.74	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.74	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.74	1
12969	1-Methylnaphthalene	90-12-0	1.1	J	1.8	0.74	1
12969	2-Methylnaphthalene	91-57-6	2.4		1.8	0.74	1
12969	Naphthalene	91-20-3	2.0		1.8	0.74	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.74	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.6	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.74	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.74	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	0.9	U	0.9	0.2	21.33
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,100		43.3	7.81	1
06944	Antimony	7440-36-0	4.33	U	4.33	0.802	1
06935	Arsenic	7440-38-2	7.44		4.33	0.758	1
06946	Barium	7440-39-3	114		1.08	0.0357	1
06947	Beryllium	7440-41-7	0.882	J	1.08	0.0726	1
07914	Boron	7440-42-8	4.23	J	10.8	0.910	1
06949	Cadmium	7440-43-9	1.08	U	1.08	0.0823	1
01650	Calcium	7440-70-2	2,670		21.7	3.62	1
06951	Chromium	7440-47-3	25.0		3.25	0.173	1
06952	Cobalt	7440-48-4	6.01		1.08	0.107	1
06953	Copper	7440-50-8	14.6		2.17	0.314	1
01654	Iron	7439-89-6	27,600		43.3	3.92	1
06955	Lead	7439-92-1	8.56		3.25	0.542	1
01656	Lithium	7439-93-2	30.0		4.3	0.37	1
01657	Magnesium	7439-95-4	5,090		10.8	1.81	1
06958	Manganese	7439-96-5	283		1.08	0.0899	1
06960	Molybdenum	7439-98-7	0.498	J	2.17	0.184	1
06961	Nickel	7440-02-0	13.7		2.17	0.141	1
10145	Phosphorus	7723-14-0	177		10.8	3.13	1
01662	Potassium	7440-09-7	1,730		108	9.03	1
01667	Sodium	7440-23-5	97.5	J	108	18.1	1
06969	Tin	7440-31-5	3.67	J	10.8	0.238	1
06970	Titanium	7440-32-6	1,380		1.08	0.184	1
06971	Vanadium	7440-62-2	49.3		1.08	0.141	1
06972	Zinc	7440-66-6	49.8		4.33	0.217	1
10146	Zirconium	7440-67-7	3.00	J	5.42	0.910	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.433	U	0.433	0.108	2
06142	Silver	7440-22-4	0.0405	J	0.217	0.0282	2
06144	Strontium	7440-24-6	27.5		0.433	0.0737	2
06145	Thallium	7440-28-0	0.259		0.217	0.0325	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0112	J	0.0183	0.0110	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19 C.	n.a.	7.15		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.08	U	1.08	0.0516	1
11031	12378-PeCDD	40321-76-4	0.0501	JBQ	5.38	0.0423	1
11031	123478-HxCDD	39227-28-6	5.38	U	5.38	0.0346	1
11031	123678-HxCDD	57653-85-7	0.0928	JBQ	5.38	0.0369	1
11031	123789-HxCDD	19408-74-3	0.0841	JQ	5.38	0.0328	1
11031	1234678-HpCDD	35822-46-9	0.752	JB	5.38	0.0383	1
11031	OCDD	3268-87-9	11.2	B	10.8	0.0470	1
11031	2378-TCDF	51207-31-9	0.0593	J	1.08	0.0582	1
11031	12378-PeCDF	57117-41-6	0.0772	JBQ	5.38	0.0271	1
11031	23478-PeCDF	57117-31-4	0.0385	JBQ	5.38	0.0270	1
11031	123478-HxCDF	70648-26-9	0.0603	JBQ	5.38	0.0298	1
11031	123678-HxCDF	57117-44-9	0.0521	JQ	5.38	0.0285	1
11031	123789-HxCDF	72918-21-9	0.0647	JQ	5.38	0.0273	1
11031	234678-HxCDF	60851-34-5	0.0661	JQ	5.38	0.0280	1
11031	1234678-HpCDF	67562-39-4	0.150	JBQ	5.38	0.0197	1
11031	1234789-HpCDF	55673-89-7	0.0416	JB	5.38	0.0274	1
11031	OCDF	39001-02-0	0.528	JBQ	10.8	0.0714	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0172				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	55	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	51	23 - 140
13C12-OCDD	41	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	53	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	64	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	60	28 - 143
13C12-1234789-HpCDF	45	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 12:32	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13329C16B	11/27/2013 12:00	Marie D Beamenderfer	21.33
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201332733245	11/23/2013 19:01	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201332733245	11/23/2013 19:01	Mitchell R Washel	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 00:47	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/04/2013 22:35	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 13:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-676-SA5A-SB-4.0-5.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290759
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 13:42

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67645 SDG#: PH133-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 10:03	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:56	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:56	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:56	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:56	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:37	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.47	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	36	U	36	12	1
10401	Dalapon	75-99-0	180	U	180	180	1
10401	2,4-DB	94-82-6	17	U	17	6.3	1
10401	Dicamba	1918-00-9	12	U	12	4.0	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1

The Quality Control data listed below is outside the project defined limits and outside the laboratory's statistically derived limits.
LCS and/or LCSD:
2,4-D
2,4-DB
Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.
Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	2.1	J	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	32		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	89		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	4.79		4.06	0.710	1
06946	Barium	7440-39-3	98.9		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.591	J	1.01	0.0680	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	4.70	J	10.1	0.852	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0771	1
01650	Calcium	7440-70-2	2,680		20.3	3.39	1
06951	Chromium	7440-47-3	21.7		3.04	0.162	1
06952	Cobalt	7440-48-4	5.61		1.01	0.100	1
06953	Copper	7440-50-8	15.2		2.03	0.294	1
01654	Iron	7439-89-6	22,100		40.6	3.67	1
06955	Lead	7439-92-1	5.87		3.04	0.507	1
01656	Lithium	7439-93-2	23.4		4.1	0.34	1
01657	Magnesium	7439-95-4	4,710		10.1	1.69	1
06958	Manganese	7439-96-5	316		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.544	J	2.03	0.172	1
06961	Nickel	7440-02-0	12.3		2.03	0.132	1
10145	Phosphorus	7723-14-0	387		10.1	2.93	1
01662	Potassium	7440-09-7	3,410		101	8.46	1
01667	Sodium	7440-23-5	124		101	16.9	1
06969	Tin	7440-31-5	3.46	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,260		1.01	0.172	1
06971	Vanadium	7440-62-2	38.5		1.01	0.132	1
06972	Zinc	7440-66-6	53.6		4.06	0.203	1
10146	Zirconium	7440-67-7	2.46	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.162	J	0.406	0.101	2
06142	Silver	7440-22-4	0.0390	J	0.203	0.0264	2
06144	Strontium	7440-24-6	20.4		0.406	0.0690	2
06145	Thallium	7440-28-0	0.274		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0168	U	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.09		0.0100	0.0100	1
	The pH was measured in water at 18.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0856	JQ	1.02	0.0552	1
11031	12378-PeCDD	40321-76-4	0.216	JBQ	5.08	0.0422	1
11031	123478-HxCDD	39227-28-6	0.116	J	5.08	0.0466	1
11031	123678-HxCDD	57653-85-7	0.317	JBQ	5.08	0.0491	1
11031	123789-HxCDD	19408-74-3	0.364	J	5.08	0.0447	1
11031	1234678-HpCDD	35822-46-9	5.89	B	5.08	0.0438	1
11031	OCDD	3268-87-9	61.6	B	10.2	0.0476	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0561	1
11031	12378-PeCDF	57117-41-6	0.240	JB	5.08	0.0308	1
11031	23478-PeCDF	57117-31-4	0.205	JBQ	5.08	0.0295	1
11031	123478-HxCDF	70648-26-9	0.138	JBQ	5.08	0.0362	1
11031	123678-HxCDF	57117-44-9	0.138	JQ	5.08	0.0340	1
11031	123789-HxCDF	72918-21-9	0.208	J	5.08	0.0409	1
11031	234678-HxCDF	60851-34-5	0.155	JQ	5.08	0.0358	1
11031	1234678-HpCDF	67562-39-4	1.32	JB	5.08	0.0232	1
11031	1234789-HpCDF	55673-89-7	0.151	JBQ	5.08	0.0288	1
11031	OCDF	39001-02-0	5.97	JB	10.2	0.0583	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.168				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/16/2013 13:10	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133370030A	12/05/2013 12:11	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133370026A	12/09/2013 10:34	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 01:05	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133370026A	12/04/2013 07:10	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133370030A	12/04/2013 07:15	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/04/2013 22:56	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 14:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290760
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:18	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:28	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:28	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:28	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:28	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.7	0.68	1
12969	Acenaphthylene	208-96-8	36		1.7	0.34	1
12969	Anthracene	120-12-7	36		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	37		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	36		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	44		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	34		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	20		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	42		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	40		18	6.1	1
12969	Chrysene	218-01-9	37		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	25		1.7	0.68	1
12969	Diethylphthalate	84-66-2	39		18	6.1	1
12969	Dimethylphthalate	131-11-3	36		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		18	6.1	1
12969	Fluoranthene	206-44-0	36		1.7	0.68	1
12969	Fluorene	86-73-7	35		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	24		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	37		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	36		1.7	0.68	1
12969	Naphthalene	91-20-3	36		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	36		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	55		18	6.1	1
12969	Phenanthrene	85-01-8	35		1.7	0.68	1
12969	Pyrene	129-00-0	37		1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	110		37	12	1
10401	Dalapon	75-99-0	110		92	45	1
10401	2,4-DB	94-82-6	110		17	6.3	1
10401	Dicamba	1918-00-9	8.8	J	12	4.1	1
10401	Dinoseb	88-85-7	28		25	9.2	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		17	9.2	1
10401	MCPA	94-74-6	8,600		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	8,800		2,600	770	1
10401	2,4,5-T	93-76-5	9.7		1.7	0.84	1
10401	2,4,5-TP	93-72-1	9.8		1.7	0.77	1
	The Quality Control data listed below is outside the project defined limits and outside the laboratory's statistically derived limits. LCS and/or LCSD: 2,4-D 2,4-DB Since this sample is the matrix spike, the data is reported.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	2.4		0.84	0.17	1
10590	Alpha BHC	319-84-6	2.6		0.84	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Beta BHC	319-85-7	2.8		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	2.8		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	5.5		1.7	0.34	1
10590	p,p-DDE	72-55-9	5.4		1.7	0.34	1
10590	p,p-DDT	50-29-3	5.6		1.7	0.36	1
10590	Delta BHC	319-86-8	2.7		0.84	0.46	1
10590	Dieldrin	60-57-1	5.4		1.7	0.34	1
10590	Endosulfan I	959-98-8	2.5		0.84	0.22	1
10590	Endosulfan II	33213-65-9	5.3		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	5.2		1.7	0.34	1
10590	Endrin	72-20-8	5.4		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	4.8		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	4.9		1.8	0.61	1
10590	Heptachlor	76-44-8	2.5		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	2.6		0.84	0.17	1
10590	Methoxychlor	72-43-5	27		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	180		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	8.0		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	16		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	29		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.3	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		40.6	7.31	1
06944	Antimony	7440-36-0	33.7		4.06	0.751	1
06935	Arsenic	7440-38-2	20.8		4.06	0.710	1
06946	Barium	7440-39-3	310		1.01	0.0335	1
06947	Beryllium	7440-41-7	5.69		1.01	0.0680	1
07914	Boron	7440-42-8	207		10.1	0.852	1
06949	Cadmium	7440-43-9	4.70		1.01	0.0771	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,420	20.3	3.39	1
06951	Chromium	7440-47-3	43.4	3.04	0.162	1
06952	Cobalt	7440-48-4	55.0	1.01	0.100	1
06953	Copper	7440-50-8	43.4	2.03	0.294	1
01654	Iron	7439-89-6	22,300	40.6	3.67	1
06955	Lead	7439-92-1	21.1	3.04	0.507	1
01656	Lithium	7439-93-2	126	4.1	0.34	1
01657	Magnesium	7439-95-4	5,270	10.1	1.69	1
06958	Manganese	7439-96-5	374	1.01	0.0842	1
06960	Molybdenum	7439-98-7	198	2.03	0.172	1
06961	Nickel	7440-02-0	63.3	2.03	0.132	1
10145	Phosphorus	7723-14-0	541	10.1	2.93	1
01662	Potassium	7440-09-7	4,830	101	8.46	1
01667	Sodium	7440-23-5	1,140	101	16.9	1
06969	Tin	7440-31-5	378	10.1	0.223	1
06970	Titanium	7440-32-6	1,600	1.01	0.172	1
06971	Vanadium	7440-62-2	94.0	1.01	0.132	1
06972	Zinc	7440-66-6	106	4.06	0.203	1
10146	Zirconium	7440-67-7	99.8	5.07	0.852	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.12	0.406	0.101	2
06142	Silver	7440-22-4	10.2	0.203	0.0264	2
06144	Strontium	7440-24-6	29.4	0.406	0.0690	2
06145	Thallium	7440-28-0	0.683	0.203	0.0304	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.177	0.0165	0.0099	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.4		1.00	0.0464	1
11031	12378-PeCDD	40321-76-4	95.9	B	5.01	0.0614	1
11031	123478-HxCDD	39227-28-6	97.1		5.01	0.0434	1
11031	123678-HxCDD	57653-85-7	100	B	5.01	0.0440	1
11031	123789-HxCDD	19408-74-3	97.9		5.01	0.0439	1
11031	1234678-HpCDD	35822-46-9	97.8	B	5.01	0.0701	1
11031	OCDD	3268-87-9	190	B	10.0	0.0603	1
11031	2378-TCDF	51207-31-9	19.2		1.00	0.0651	1
11031	12378-PeCDF	57117-41-6	96.4	B	5.01	0.0370	1
11031	23478-PeCDF	57117-31-4	99.9	B	5.01	0.0384	1
11031	123478-HxCDF	70648-26-9	106	B	5.01	0.0475	1
11031	123678-HxCDF	57117-44-9	104		5.01	0.0423	1
11031	123789-HxCDF	72918-21-9	105		5.01	0.0539	1
11031	234678-HxCDF	60851-34-5	104		5.01	0.0455	1
11031	1234678-HpCDF	67562-39-4	103	B	5.01	0.0397	1
11031	1234789-HpCDF	55673-89-7	105	B	5.01	0.0661	1
11031	OCDF	39001-02-0	199	B	10.0	0.0830	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	57	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	58	23 - 140
13C12-OCDD	46	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	47	26 - 138
13C12-OCDF	39	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/16/2013 13:43	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133370030A	12/05/2013 12:37	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133370026A	12/09/2013 10:49	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 01:24	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133370026A	12/04/2013 07:10	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133370030A	12/04/2013 07:15	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/04/2013 23:18	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 15:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290761
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:29	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:34	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:34	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:34	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:34	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:49	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	35		1.7	0.68	1
12969	Acenaphthylene	208-96-8	35		1.7	0.34	1
12969	Anthracene	120-12-7	34		1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	36		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	35		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	46		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	34		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	19		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	39		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	44		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	39		18	6.1	1
12969	Chrysene	218-01-9	36		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	22		1.7	0.68	1
12969	Diethylphthalate	84-66-2	39		18	6.1	1
12969	Dimethylphthalate	131-11-3	36		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	42		18	6.1	1
12969	Fluoranthene	206-44-0	35		1.7	0.68	1
12969	Fluorene	86-73-7	34		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	21		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	35		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	34		1.7	0.68	1
12969	Naphthalene	91-20-3	35		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	34		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	65		18	6.1	1
12969	Phenanthrene	85-01-8	34		1.7	0.68	1
12969	Pyrene	129-00-0	37		1.7	0.68	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	100		37	12	1
10401	Dalapon	75-99-0	110		92	45	1
10401	2,4-DB	94-82-6	110		17	6.4	1
10401	Dicamba	1918-00-9	9.1	J	12	4.1	1
10401	Dinoseb	88-85-7	31		25	9.2	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	120		17	9.2	1
10401	MCPA	94-74-6	8,500		2,600	780	1
10401	MCPP (Mecoprop)	93-65-2	8,300		2,600	770	1
10401	2,4,5-T	93-76-5	9.5		1.7	0.84	1
10401	2,4,5-TP	93-72-1	9.7		1.7	0.77	1
	The Quality Control data listed below is outside the project defined limits and outside the laboratory's statistically derived limits.						
	LCS and/or LCSD:						
	2,4-D						
	2,4-DB						
	Since this sample is the matrix spike duplicate, the data is reported.						
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	2.7		0.84	0.17	1
10590	Alpha BHC	319-84-6	2.8		0.84	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Beta BHC	319-85-7	3.1		1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	3.0		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	6.7		1.7	0.33	1
10590	p,p-DDE	72-55-9	6.2		1.7	0.33	1
10590	p,p-DDT	50-29-3	7.3		1.7	0.35	1
10590	Delta BHC	319-86-8	3.0		0.84	0.45	1
10590	Dieldrin	60-57-1	6.0		1.7	0.33	1
10590	Endosulfan I	959-98-8	2.8		0.84	0.22	1
10590	Endosulfan II	33213-65-9	6.4		1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	5.9		1.7	0.33	1
10590	Endrin	72-20-8	6.0		1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	5.7		1.7	0.33	1
10590	Endrin Ketone	53494-70-5	5.7		1.8	0.61	1
10590	Heptachlor	76-44-8	2.7		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	2.9		0.84	0.17	1
10590	Methoxychlor	72-43-5	32		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	33	U	33	10	1
13099	Aroclor 5442	12642-23-8	33	U	33	10	1
13099	Aroclor 5460	11126-42-4	33	U	33	10	1
13099	PCB-1016	12674-11-2	160		17	3.3	1
13099	PCB-1221	11104-28-2	17	U	17	5.1	1
13099	PCB-1232	11141-16-5	17	U	17	4.1	1
13099	PCB-1242	53469-21-9	17	U	17	4.1	1
13099	PCB-1248	12672-29-6	17	U	17	3.3	1
13099	PCB-1254	11097-69-1	17	U	17	4.4	1
13099	PCB-1260	11096-82-5	160		17	3.9	1
13099	PCB-1262	37324-23-5	17	U	17	3.3	1
13099	PCB-1268	11100-14-4	17	U	17	3.3	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.5	J	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	7.2		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	21		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.1	J	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		40.6	7.31	1
06944	Antimony	7440-36-0	32.8		4.06	0.751	1
06935	Arsenic	7440-38-2	20.4		4.06	0.710	1
06946	Barium	7440-39-3	306		1.01	0.0335	1
06947	Beryllium	7440-41-7	5.63		1.01	0.0680	1
07914	Boron	7440-42-8	205		10.1	0.852	1
06949	Cadmium	7440-43-9	4.64		1.01	0.0771	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,550	20.3	3.39	1
06951	Chromium	7440-47-3	42.3	3.04	0.162	1
06952	Cobalt	7440-48-4	54.4	1.01	0.100	1
06953	Copper	7440-50-8	42.4	2.03	0.294	1
01654	Iron	7439-89-6	22,200	40.6	3.67	1
06955	Lead	7439-92-1	21.2	3.04	0.507	1
01656	Lithium	7439-93-2	125	4.1	0.34	1
01657	Magnesium	7439-95-4	5,100	10.1	1.69	1
06958	Manganese	7439-96-5	381	1.01	0.0842	1
06960	Molybdenum	7439-98-7	197	2.03	0.172	1
06961	Nickel	7440-02-0	62.2	2.03	0.132	1
10145	Phosphorus	7723-14-0	532	10.1	2.93	1
01662	Potassium	7440-09-7	4,820	101	8.46	1
01667	Sodium	7440-23-5	1,130	101	16.9	1
06969	Tin	7440-31-5	377	10.1	0.223	1
06970	Titanium	7440-32-6	1,530	1.01	0.172	1
06971	Vanadium	7440-62-2	92.4	1.01	0.132	1
06972	Zinc	7440-66-6	105	4.06	0.203	1
10146	Zirconium	7440-67-7	99.1	5.07	0.852	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.15	0.406	0.101	2
06142	Silver	7440-22-4	10.4	0.203	0.0264	2
06144	Strontium	7440-24-6	29.2	0.406	0.0690	2
06145	Thallium	7440-28-0	0.660	0.203	0.0304	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.182	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.4	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	18.6		1.01	0.0650	1
11031	12378-PeCDD	40321-76-4	94.6	B	5.05	0.0563	1
11031	123478-HxCDD	39227-28-6	99.9		5.05	0.0477	1
11031	123678-HxCDD	57653-85-7	99.0	B	5.05	0.0501	1
11031	123789-HxCDD	19408-74-3	98.3		5.05	0.0496	1
11031	1234678-HpCDD	35822-46-9	97.8	B	5.05	0.0743	1
11031	OCDD	3268-87-9	221	B	10.1	0.0804	1
11031	2378-TCDF	51207-31-9	18.5		1.01	0.0639	1
11031	12378-PeCDF	57117-41-6	98.5	B	5.05	0.0443	1
11031	23478-PeCDF	57117-31-4	100	B	5.05	0.0452	1
11031	123478-HxCDF	70648-26-9	104	B	5.05	0.0615	1
11031	123678-HxCDF	57117-44-9	105		5.05	0.0575	1
11031	123789-HxCDF	72918-21-9	104		5.05	0.0647	1
11031	234678-HxCDF	60851-34-5	103		5.05	0.0556	1
11031	1234678-HpCDF	67562-39-4	103	B	5.05	0.0491	1
11031	1234789-HpCDF	55673-89-7	104	B	5.05	0.0680	1
11031	OCDF	39001-02-0	204	B	10.1	0.119	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	55	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	54	23 - 140
13C12-OCDD	40	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	53	24 - 185
13C12-23478-PeCDF	49	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	58	28 - 143
13C12-1234789-HpCDF	46	26 - 138
13C12-OCDF	37	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/16/2013 14:17	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133370030A	12/05/2013 13:04	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133370026A	12/09/2013 11:05	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 01:42	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133370026A	12/04/2013 07:10	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133370030A	12/04/2013 07:15	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/04/2013 23:39	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 16:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290762
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:33	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:37	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:37	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:37	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:37	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:51	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290763
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.751	1
06935	Arsenic	7440-38-2	5.51		4.06	0.710	1
06946	Barium	7440-39-3	103		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.618	J	1.01	0.0680	1
07914	Boron	7440-42-8	4.01	J	10.1	0.852	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0771	1
01650	Calcium	7440-70-2	2,710		20.3	3.39	1
06951	Chromium	7440-47-3	22.3		3.04	0.162	1
06952	Cobalt	7440-48-4	6.15		1.01	0.100	1
06953	Copper	7440-50-8	16.3		2.03	0.294	1
01654	Iron	7439-89-6	23,900		40.6	3.67	1
06955	Lead	7439-92-1	6.77		3.04	0.507	1
01656	Lithium	7439-93-2	24.3		4.1	0.34	1
01657	Magnesium	7439-95-4	5,020		10.1	1.69	1
06958	Manganese	7439-96-5	331		1.01	0.0842	1
06960	Molybdenum	7439-98-7	0.402	J	2.03	0.172	1
06961	Nickel	7440-02-0	13.1		2.03	0.132	1
10145	Phosphorus	7723-14-0	457		10.1	2.93	1
01662	Potassium	7440-09-7	3,610		101	8.46	1
01667	Sodium	7440-23-5	126		101	16.9	1
06969	Tin	7440-31-5	3.43	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,250		1.01	0.172	1
06971	Vanadium	7440-62-2	41.6		1.01	0.132	1
06972	Zinc	7440-66-6	57.3		4.06	0.203	1
10146	Zirconium	7440-67-7	2.89	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.159	J	0.406	0.101	2
06142	Silver	7440-22-4	0.203	U	0.203	0.0264	2
06144	Strontium	7440-24-6	20.7		0.406	0.0690	2
06145	Thallium	7440-28-0	0.268		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0167	U	0.0167	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.03		0.0100	0.0100	1
	The pH was measured in water at 19.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.4		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.3		0.10	0.10	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-686-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290763
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:35

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

68600 SDG#: PH133-07DUP

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 09:25	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:32	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:32	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:32	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:32	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	240	U	240	240	1
10401	2,4-DB	94-82-6	18	U	18	6.4	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	25	U	25	9.3	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	18	U	18	9.3	1
10401	MCPA	94-74-6	2,600	U	2,600	790	1
10401	MCPP (Mecoprop)	93-65-2	2,600	U	2,600	780	1
10401	2,4,5-T	93-76-5	1.8	U	1.8	0.85	1
10401	2,4,5-TP	93-72-1	1.8	U	1.8	0.78	1

The Quality Control data listed below is outside the project defined limits and outside the laboratory's statistically derived limits.
LCS and/or LCSD:
2,4-D
2,4-DB

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
	Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported. Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.86	U	0.86	0.18	1
10590	Alpha BHC	319-84-6	0.86	U	0.86	0.18	1
10590	Beta BHC	319-85-7	1.6	J	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.86	U	0.86	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.1	1
10590	p,p-DDD	72-54-8	3.2		1.8	0.34	1
10590	p,p-DDE	72-55-9	1.5	J	1.8	0.34	1
10590	p,p-DDT	50-29-3	6.7		1.8	0.36	1
10590	Delta BHC	319-86-8	0.86	U	0.86	0.46	1
10590	Dieldrin	60-57-1	0.37	J	1.8	0.34	1
10590	Endosulfan I	959-98-8	0.86	U	0.86	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.34	1
10590	Endrin	72-20-8	1.8	U	1.8	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.86	U	0.86	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.86	U	0.86	0.18	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	26	U	26	10	5
12952	EFH (C15-C20)	n.a.	26	U	26	10	5
12952	EFH (C21-C30)	n.a.	130		26	10	5
12952	EFH (C30-C40)	n.a.	320		52	21	5
12952	EFH (C8-C11)	n.a.	26	U	26	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		39.9	7.20	1
06944	Antimony	7440-36-0	3.99	U	3.99	0.739	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	5.35	3.99	0.699	1
06946	Barium	7440-39-3	105	0.998	0.0329	1
06947	Beryllium	7440-41-7	0.715 J	0.998	0.0669	1
07914	Boron	7440-42-8	4.18 J	9.98	0.839	1
06949	Cadmium	7440-43-9	0.998 U	0.998	0.0759	1
01650	Calcium	7440-70-2	2,170	20.0	3.33	1
06951	Chromium	7440-47-3	23.9	3.00	0.160	1
06952	Cobalt	7440-48-4	6.30	0.998	0.0988	1
06953	Copper	7440-50-8	15.4	2.00	0.290	1
01654	Iron	7439-89-6	22,700	39.9	3.61	1
06955	Lead	7439-92-1	8.45	3.00	0.499	1
01656	Lithium	7439-93-2	20.2	4.0	0.34	1
01657	Magnesium	7439-95-4	4,300	9.98	1.67	1
06958	Manganese	7439-96-5	321	0.998	0.0829	1
06960	Molybdenum	7439-98-7	1.04 J	2.00	0.170	1
06961	Nickel	7440-02-0	13.0	2.00	0.130	1
10145	Phosphorus	7723-14-0	279	9.98	2.89	1
01662	Potassium	7440-09-7	3,110	99.8	8.33	1
01667	Sodium	7440-23-5	171	99.8	16.7	1
06969	Tin	7440-31-5	3.19 J	9.98	0.220	1
06970	Titanium	7440-32-6	1,290	0.998	0.170	1
06971	Vanadium	7440-62-2	43.1	0.998	0.130	1
06972	Zinc	7440-66-6	48.2	3.99	0.200	1
10146	Zirconium	7440-67-7	2.95 J	4.99	0.839	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.137 J	0.399	0.0998	2
06142	Silver	7440-22-4	0.0333 J	0.200	0.0260	2
06144	Strontium	7440-24-6	21.7	0.399	0.0679	2
06145	Thallium	7440-28-0	0.282	0.200	0.0300	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164 U	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.62	0.0100	0.0100	1
	The pH was measured in water at 19 C.					
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.7	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.128	JQ	1.03	0.0697	1
11031	12378-PeCDD	40321-76-4	0.385	JBQ	5.15	0.0543	1
11031	123478-HxCDD	39227-28-6	0.244	JQ	5.15	0.0469	1
11031	123678-HxCDD	57653-85-7	0.277	JB	5.15	0.0468	1
11031	123789-HxCDD	19408-74-3	0.319	JQ	5.15	0.0468	1
11031	1234678-HpCDD	35822-46-9	0.584	JBQ	5.15	0.0475	1
11031	OCDD	3268-87-9	3.25	JB	10.3	0.0540	1
11031	2378-TCDF	51207-31-9	0.106	JQ	1.03	0.0688	1
11031	12378-PeCDF	57117-41-6	0.486	JBQ	5.15	0.0340	1
11031	23478-PeCDF	57117-31-4	0.435	JBQ	5.15	0.0331	1
11031	123478-HxCDF	70648-26-9	0.344	JB	5.15	0.0435	1
11031	123678-HxCDF	57117-44-9	0.353	J	5.15	0.0407	1
11031	123789-HxCDF	72918-21-9	0.389	J	5.15	0.0494	1
11031	234678-HxCDF	60851-34-5	0.368	J	5.15	0.0434	1
11031	1234678-HpCDF	67562-39-4	0.303	JBQ	5.15	0.0256	1
11031	1234789-HpCDF	55673-89-7	0.212	JBQ	5.15	0.0317	1
11031	OCDF	39001-02-0	0.553	JB	10.3	0.0908	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.174				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	56	23 - 140
13C12-OCDD	41	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	58	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	58	28 - 143
13C12-1234789-HpCDF	48	26 - 138
13C12-OCDF	36	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLE026	12/14/2013 13:06	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLE026	12/04/2013 17:45	Nicholas W Shroyer	1
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133370030A	12/05/2013 13:31	Melissa McDermott	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133370026A	12/09/2013 11:20	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133320018A	12/04/2013 02:01	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133320018A	12/02/2013 06:30	Roman Kuropatkin	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133370026A	12/04/2013 07:10	Katheryne V Sponheimer	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133370030A	12/04/2013 07:15	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133370016A	12/06/2013 05:13	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	133370016A	12/03/2013 19:30	Sally L Appleyard	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344002	12/12/2013 17:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344002	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06944	Antimony	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06935	Arsenic	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06946	Barium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06947	Beryllium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
07914	Boron	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06949	Cadmium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
01650	Calcium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06951	Chromium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06952	Cobalt	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06953	Copper	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
01654	Iron	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06955	Lead	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
01656	Lithium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
01657	Magnesium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06958	Manganese	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06960	Molybdenum	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06961	Nickel	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
01662	Potassium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-986-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7290764
LL Group # 1436294
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/22/2013 14:40

Submitted: 11/23/2013 09:30
Reported: 12/17/2013 12:07

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

98600 SDG#: PH133-08*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01667	Sodium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06969	Tin	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06970	Titanium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06971	Vanadium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06972	Zinc	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
10146	Zirconium	SW-846 6010C	1	133400637002	12/09/2013 10:06	John W Yanzuk II	1
06141	Selenium	SW-846 6020A	1	133400637002B	12/09/2013 19:58	John P Hook	2
06142	Silver	SW-846 6020A	1	133400637002A	12/09/2013 19:58	John P Hook	2
06144	Strontium	SW-846 6020A	1	133400637002A	12/09/2013 19:58	John P Hook	2
06145	Thallium	SW-846 6020A	1	133400637002A	12/09/2013 19:58	John P Hook	2
00159	3a Mercury 7471A	SW-846 7471B	1	133400638001	12/07/2013 14:53	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133400637002	12/08/2013 22:00	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133400638001	12/07/2013 12:35	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13328039401A	11/24/2013 09:45	Erik J Frederiksen	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13338SLE026	Sample number(s): 7290754-7290756,7290758-7290762,7290764									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	105		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	107		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	106		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	112		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	105		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	113		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	103		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	106		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	114		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	123		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	112		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	111		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	114		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	110		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	121		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	105		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	107		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	103		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	106		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	109		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	104		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	103		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	128		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	104		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	118*		79-112		
Batch number: 13329C16B	Sample number(s): 7290755-7290756,7290759									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	85		67-119		
Batch number: 13330A94A	Sample number(s): 7290757									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	104	99	75-135	4	30
Batch number: 133370030A	Sample number(s): 7290760-7290762,7290764									
2,4-D	36	U	36.	12	ug/kg	135*		59-122		
Dalapon	90	U	90.	44	ug/kg	57		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	134*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	105		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	14		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	149		65-158		
MCPA	2,500 U		2,500.	760	ug/kg	105		56-133		
MCPP (Mecoprop)	2,500		2,500.	750	ug/kg	110		54-134		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U									
2,4,5-T	1.7	U	1.7	0.82	ug/kg	125		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	121		63-130		
Batch number: 133320018A	Sample number(s): 7290754-7290756,7290758-7290762,7290764									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	94	95	36-106	1	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	98		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	109		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133370026A	Sample number(s): 7290760-7290762,7290764									
Aldrin	0.83	U	0.83	0.17	ug/kg	89		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	92		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	97		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	97		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	98		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	100		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	104		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	96		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	95		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	90		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	104		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	101		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	92		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	94		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	96		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	88		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	94		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	94		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 133370016A	Sample number(s): 7290754-7290756,7290758-7290762,7290764									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	94		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	97		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	96		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	78		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	78		60-115		
Batch number: 133400637002	Sample number(s): 7290754-7290756,7290758-7290764									
Aluminum	40.0	U	40.0	7.21	mg/kg	107		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	107		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	104		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	102		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	99		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	102		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Calcium	3.62	J	20.0	3.34	mg/kg	104		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	101		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	104		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	102		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	102		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	103		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	107		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	102		80-120		
Sodium	100 U		100.	16.7	mg/kg	102		80-120		
Tin	1.43	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	103		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	102		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	102		80-120		
Batch number: 133400637002A	Sample number(s): 7290754-7290756,7290758-7290764									
Silver	0.200	U	0.200	0.0260	mg/kg	103		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	107		80-120		
Thallium	0.0320	J	0.200	0.0300	mg/kg	108		80-120		
Batch number: 133400637002B	Sample number(s): 7290754-7290756,7290758-7290764									
Selenium	0.400	U	0.400	0.100	mg/kg	106		80-120		
Batch number: 133400638001	Sample number(s): 7290754-7290756,7290758-7290764									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	105		85-120		
Batch number: 13328039401A	Sample number(s): 7290754-7290756,7290758-7290760,7290763-7290764									
15a pH by 9045D						100		95-105		
Batch number: 13339162401A	Sample number(s): 7290754-7290756,7290758-7290764									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13344002	Sample number(s): 7290754-7290756,7290758-7290762,7290764									
2378-TCDD	1.00	U	1.00	0.0821	ng/kg	89		67-158		
12378-PeCDD	0.0696	J	5.00	0.0601	ng/kg	97		70-142		
123478-HxCDD	5.00	U	5.00	0.0405	ng/kg	100		70-164		
123678-HxCDD	0.0597	J	5.00	0.0402	ng/kg	99		76-134		
123789-HxCDD	5.00	U	5.00	0.0389	ng/kg	99		64-162		
1234678-HpCDD	0.0821	J	5.00	0.0481	ng/kg	97		70-140		
OCDD	0.452	J	10.0	0.0584	ng/kg	97		78-144		
2378-TCDF	1.00	U	1.00	0.0858	ng/kg	99		75-158		
12378-PeCDF	0.0848	J	5.00	0.0495	ng/kg	98		80-134		
23478-PeCDF	0.103	J	5.00	0.0494	ng/kg	100		68-160		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123478-HxCDF	0.0702	J	5.00	0.0479	ng/kg	102		72-134		
123678-HxCDF	5.00	U	5.00	0.0417	ng/kg	103		84-130		
123789-HxCDF	5.00	U	5.00	0.0513	ng/kg	102		78-130		
234678-HxCDF	5.00	U	5.00	0.0459	ng/kg	102		70-156		
1234678-HpCDF	0.0752	J	5.00	0.0228	ng/kg	100		82-122		
1234789-HpCDF	0.0762	J	5.00	0.0376	ng/kg	105		78-138		
OCDF	0.270	J	10.0	0.0941	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.00710				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13338SLE026	Sample number(s): 7290754-7290756,7290758-7290762,7290764 UNSPK: 7290760								
Acenaphthene	103	101	48-127	1	30				
Acenaphthylene	105	103	49-121	2	30				
Anthracene	104	100	52-126	4	30				
Benzo(a)anthracene	108	106	44-143	2	30				
Benzo(a)pyrene	105	103	44-140	2	30				
Benzo(b)fluoranthene	129	134	26-142	4	30				
Benzo(e)pyrene	98	101	70-130	2	30				
Benzo(g,h,i)perylene	60	57	33-141	5	30				
Benzo(k)fluoranthene	113	114	54-142	1	30				
Butylbenzylphthalate	123	130	49-151	5	30				
Di-n-butylphthalate	118	115	52-147	3	30				
Chrysene	107	105	29-148	2	30				
Dibenz(a,h)anthracene	73	65	20-137	11	30				
Diethylphthalate	114	114	43-145	0	30				
Dimethylphthalate	106	106	58-129	1	30				
Bis(2-Ethylhexyl)phthalate	121	124	39-167	3	30				
Fluoranthene	104	102	40-148	2	30				
Fluorene	103	101	51-137	2	30				
Indeno(1,2,3-cd)pyrene	70	62	17-136	11	30				
1-Methylnaphthalene	108	103	50-131	5	30				
2-Methylnaphthalene	104	101	35-152	3	30				
Naphthalene	106	102	31-148	4	30				
N-Nitrosodimethylamine	104	99	48-113	5	30				
Di-n-octylphthalate	161	191*	52-162	17	30				
Phenanthrene	103	99	29-142	4	30				
Pyrene	109	109	26-143	0	30				
Batch number: 13329C16B	Sample number(s): 7290755-7290756,7290759 UNSPK: P282330								
11a TPH by EPA 8015B GRO	84	86	69-123	10	30				
Batch number: 133370030A	Sample number(s): 7290760-7290762,7290764 UNSPK: 7290760								
2,4-D	128	121	42-143	5	35				

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Quality Control Summary

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Reported: 12/17/13 at 12:07 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dalapon	52	53	16-98	3	50				
2,4-DB	130	126	10-179	3	50				
Dicamba	103	107	55-133	4	50				
Dinoseb	20	21	10-52	9	35				
2,4-DP (Dichlorprop)	146	136	32-171	7	50				
MCPA	100	99	23-169	1	50				
MCPP (Mecoprop)	103	96	24-164	7	50				
2,4,5-T	114	111	12-172	2	35				
2,4,5-TP	115	113	10-142	1	35				
Batch number: 133320018A	Sample number(s): 7290754-7290756,7290758-7290762,7290764 UNSPK: 7290760								
PCB-1016	99	97	41-135	3	50				
PCB-1260	106	96	40-134	11	50				
Batch number: 133370026A	Sample number(s): 7290760-7290762,7290764 UNSPK: 7290760								
Aldrin	71	79	16-126	11	50				
Alpha BHC	75	82	14-140	9	50				
Beta BHC	81	91	42-133	11	50				
Gamma BHC - Lindane	80	87	30-137	8	50				
p,p-DDD	75	91	43-149	19	50				
p,p-DDE	78	91	35-152	14	50				
p,p-DDT	77	101	12-193	27	50				
Delta BHC	78	88	13-153	11	50				
Dieldrin	76	84	41-153	10	50				
Endosulfan I	71	80	26-146	12	50				
Endosulfan II	77	93	34-141	18	50				
Endosulfan Sulfate	76	88	10-181	13	50				
Endrin	73	82	30-152	11	50				
Endrin Aldehyde	69	81	23-138	17	50				
Endrin Ketone	71	83	30-148	15	50				
Heptachlor	71	78	16-152	8	50				
Heptachlor Epoxide	74	85	33-144	13	50				
Methoxychlor	74	88	41-161	17	50				
Batch number: 133370016A	Sample number(s): 7290754-7290756,7290758-7290762,7290764 UNSPK: 7290760								
EFH (C12-C14)	97	88	49-123	10	20				
EFH (C15-C20)	76	66	49-123	10	20				
EFH (C21-C30)	-127*	-141*	49-123	12	20				
EFH (C30-C40)	-387 (2)	-436 (2)	49-123	30*	20				
EFH (C8-C11)	84	79	49-123	7	20				
Batch number: 133400637002	Sample number(s): 7290754-7290756,7290758-7290764 UNSPK: 7290760 BKG: 7290760								
Aluminum	1019 (2)	969 (2)	75-125	1	20	16,400	16,500	0	20
Antimony	67*	65*	75-125	3	20	3.96 U	3.96 U	0 (1)	20
Arsenic	105	103	75-125	1	20	4.67	5.37	14 (1)	20
Barium	104	102	75-125	1	20	96.5	101	4	20
Beryllium	101	99	75-125	1	20	0.577 J	0.603 J	4 (1)	20
Boron	100	99	75-125	1	20	4.59 J	3.91 J	16 (1)	20
Cadmium	93	92	75-125	1	20	0.990 U	0.990 U	0 (1)	20
Calcium	183 (2)	215 (2)	75-125	4	20	2,610	2,650	1	20

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Quality Control Summary

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Reported: 12/17/13 at 12:07 PM

Sample Matrix Quality Control

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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	107	102	75-125	2	20	21.1	21.8	3	20
Cobalt	97	96	75-125	1	20	5.48	6.01	9	20
Copper	111	107	75-125	2	20	14.8	15.9	7	20
Iron	231 (2)	105 (2)	75-125	1	20	21,500	23,300	8	20
Lead	100	101	75-125	1	20	5.73	6.61	14 (1)	20
Lithium	102	100	75-125	1	20	22.8	23.7	4	20
Magnesium	276 (2)	194 (2)	75-125	3	20	4,590	4,900	7	20
Manganese	115 (2)	129 (2)	75-125	2	20	308	323	5	20
Molybdenum	97	97	75-125	1	20	0.531 J	0.392 J	30* (1)	20
Nickel	101	98	75-125	2	20	12.0	12.8	6	20
Phosphorus	151*	143*	75-125	2	20	378	446	16	20
Potassium	141*	140*	75-125	0	20	3,320	3,520	6	20
Sodium	100	99	75-125	1	20	121	123	1 (1)	20
Tin	92	92	75-125	0	20	3.38 J	3.34 J	1 (1)	20
Titanium	339 (2)	265 (2)	75-125	5	20	1,230	1,220	1	20
Vanadium	109	106	75-125	2	20	37.5	40.6	8	20
Zinc	103	101	75-125	1	20	52.3	55.9	7	20
Zirconium	96	95	75-125	1	20	2.40 J	2.82 J	16 (1)	20
Batch number: 133400637002A	Sample number(s): 7290754-7290756,7290758-7290764 UNSPK: 7290760 BKG: 7290760								
Silver	100	102	75-125	2	20	0.0380 J	0.198 U	200* (1)	20
Strontium	111	109	75-125	1	20	19.9	20.2	1	20
Thallium	101	95	75-125	3	20	0.268	0.261	2 (1)	20
Batch number: 133400637002B	Sample number(s): 7290754-7290756,7290758-7290764 UNSPK: 7290760 BKG: 7290760								
Selenium	96	98	75-125	1	20	0.158 J	0.155 J	2 (1)	20
Batch number: 133400638001	Sample number(s): 7290754-7290756,7290758-7290764 UNSPK: 7290760 BKG: 7290760								
3a Mercury 7471A	108	109	65-135	3	20	0.0164 U	0.0163 U	0 (1)	20
Batch number: 13328039401A	Sample number(s): 7290754-7290756,7290758-7290760,7290763-7290764 BKG: 7290760								
15a pH by 9045D						7.09	7.03	1	3
Batch number: 13339162401A	Sample number(s): 7290754-7290756,7290758-7290764 BKG: 7290760								
14a Moisture Content by 160.3						2.4	2.3	4	20
14a Moisture Content by 160.3						2.4	2.3	4	20
14a Moisture Content by 160.3						2.4	2.3	4	20
Batch number: 13344002	Sample number(s): 7290754-7290756,7290758-7290762,7290764 UNSPK: 7290760								
2378-TCDD	86	92	40-135	7	20				
12378-PeCDD	95	93	40-135	1	20				
123478-HxCDD	97	99	40-135	3	20				
123678-HxCDD	100	98	40-135	1	20				
123789-HxCDD	97	97	40-135	0	20				
1234678-HpCDD	92	91	40-135	0	20				
OCDD	64	79	40-135	15	20				
2378-TCDF	96	91	40-135	4	20				
12378-PeCDF	96	97	40-135	2	20				
23478-PeCDF	99	99	40-135	1	20				
123478-HxCDF	105	103	40-135	2	20				
123678-HxCDF	103	104	40-135	2	20				
123789-HxCDF	104	103	40-135	1	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
234678-HxCDF	104	102	40-135	1	20				
1234678-HpCDF	101	101	40-135	0	20				
1234789-HpCDF	104	103	40-135	0	20				
OCDF	96	98	40-135	3	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13338SLE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7290754	80	75	88
7290755	73	72	81
7290756	88	91	97
7290758	86	87	94
7290759	86	90	94
7290760	89	92	98
7290761	89	92	97
7290762	85	89	95
7290764	88	88	95
Blank	87	90	99
LCS	88	91	101
MS	89	92	97
MSD	85	89	95
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13329C16B

	Trifluorotoluene-F
7290755	98
7290756	86
7290759	91
Blank	113
LCS	101
MS	97
MSD	98
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13330A94A

	Trifluorotoluene-F

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Surrogate Quality Control

7290757	87	
Blank	99	
LCS	93	
LCSD	91	
Limits:	63-135	

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133320018A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7290754	110	72
7290755	112	88
7290756	115	97
7290758	108	89
7290759	114	99
7290760	111	106
7290761	107	101
7290762	106	98
7290764	113	105
Blank	111	116
LCS	110	119
LCSD	114	118
MS	107	101
MSD	106	98
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133370026A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7290760	85	85
7290761	77	80
7290762	80	95
7290764	79	79
Blank	89	111
LCS	90	109
MS	77	80
MSD	80	95
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 133370030A

	2,4-Dichlorophenylacetic acid
7290760	93
7290761	106
7290762	96
7290764	96
Blank	99
LCS	102
MS	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Surrogate Quality Control

MSD	96	
Limits:	50-150	

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133370016A

	Chlorobenzene	Orthoterphenyl
7290754	101	101
7290755	88	86
7290756	98	95
7290758	99	96
7290759	99	96
7290760	97	94
7290761	103	99
7290762	93	91
7290764	103	100
Blank	93	95
LCS	99	97
MS	103	99
MSD	93	91
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13344002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7290754	67	53	69	70	71	65
7290755	71	59	69	72	70	74
7290756	60	46	59	64	61	55
7290758	61	52	60	64	67	69
7290759	60	53	61	65	64	73
7290760	72	65	74	76	75	71
7290761	69	55	69	76	73	67
7290762	64	49	64	68	71	67
7290764	66	55	63	66	63	62
Blank	59	49	55	62	58	57
MS	69	55	69	76	73	67
MSD	64	49	64	68	71	67
OPR	60	50	60	67	63	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7290754	56	49	35	57	73	73
7290755	66	52	40	61	73	73
7290756	65	42	32	51	65	66
7290758	61	50	42	52	69	68
7290759	60	45	37	55	67	66
7290760	67	57	48	67	78	76
7290761	70	47	39	57	78	79
7290762	58	46	37	55	76	77
7290764	58	48	36	58	67	69
Blank	67	43	38	54	65	67

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436294
Reported: 12/17/13 at 12:07 PM

Surrogate Quality Control

MS	70	47	39	57	78	79
MSD	58	46	37	55	76	77
OPR	71	47	37	54	71	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7290754	71	56	39	62	54
7290755	73	59	44	63	61
7290756	62	53	39	51	53
7290758	68	56	46	57	55
7290759	65	51	41	54	55
7290760	76	63	54	66	67
7290761	77	58	46	60	60
7290762	72	54	40	59	53
7290764	67	56	41	55	58
Blank	66	55	47	52	52
MS	77	58	46	60	60
MSD	72	54	40	59	53
OPR	70	60	47	52	57
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1436294 7290754-64

CDM Smith

DateShipped: 11/22/2013

CarrierName: FedEx

AirbillNo: 7972 3287 2931

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20131122-02

Cooler #: 1

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-673-SA5A-SB-0.0-0.5	11/22/13 11:33	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-673-SA5A-SB-0.0-0.5	11/22/13 11:33	SO	None	1 - 4 oz glass	10 day													X																						
SL-673-SA5A-SB-4.0-5.0	11/22/13 11:15	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-673-SA5A-SB-4.0-5.0	11/22/13 11:15	SO	None	2 - Encore	10 day																				X															
SL-673-SA5A-SB-10.5-11.5	11/22/13 11:21	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-673-SA5A-SB-10.5-11.5	11/22/13 11:21	SO	None	2 - Encore	10 day																				X															
TB-112213	11/22/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X															
SL-676-SA5A-SB-0.0-0.5	11/22/13 13:30	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-676-SA5A-SB-0.0-0.5	11/22/13 13:30	SO	None	1 - 4 oz glass	10 day													X																					
SL-676-SA5A-SB-4.0-5.0	11/22/13 13:42	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-676-SA5A-SB-4.0-5.0	11/22/13 13:42	SO	None	2 - Encore	10 day																				X															
SL-686-SA5A-SB-0.0-0.5MS	11/22/13 14:35	SO	None	6 - SS-Sleeve	10 day	X	X					X		X	X						X	X				X														
SL-686-SA5A-SB-0.0-0.5MS	11/22/13 14:35	SO	None	3 - 4 oz glass	10 day													X																					
SL-986-SA5A-SB-0.0-0.5	11/22/13 14:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X						X	X				X														
SL-986-SA5A-SB-0.0-0.5	11/22/13 14:40	SO	None	1 - 4 oz glass	10 day													X																					

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/22/13	1545									
										11/23/13	0930

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1436294

Client/Project: CDM Smith

Date of Receipt: 11/23/13

Time of Receipt: 0930

Source Code: 5

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	3258	2.6	ST	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 5200 **Date/Time:** 11/23/13 1210

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 11/26/2013
Group Number: 1436802
SDG: PH134
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-584-SA5A-SB-0.0-0.5 Soil	7293060
SL-715-SA5A-SB-0.0-0.5 Soil	7293061
SL-715-SA5A-SB-0.0-0.5MS Soil	7293062
SL-715-SA5A-SB-0.0-0.5MSD Soil	7293063
SL-715-SA5A-SB-0.0-0.5SS Soil	7293064
SL-715-SA5A-SB-0.0-0.5IS Soil	7293065
SL-715-SA5A-SB-0.0-0.5PDS Soil	7293066
SL-715-SA5A-SB-0.0-0.5DUP Soil	7293067
SL-715-SA5A-SB-6.0-7.0 Soil	7293068
SL-1015-SA5A-SB-0.0-0.5 Soil	7293069
TB-112513 Water	7293070
SL-631-SA5A-SB-0.0-0.5 Soil	7293071

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.41	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.4	J	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.5	J	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	3.1		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.5	J	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	3.1		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	9.1	J	19	6.2	1
12969	Fluoranthene	206-44-0	3.3		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	0.86	J	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.6	J	1.7	0.69	1
12969	Pyrene	129-00-0	3.1		1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	4.7	J	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		40.5	7.31	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.750	1
06935	Arsenic	7440-38-2	2.95	J	4.05	0.709	1
06946	Barium	7440-39-3	89.9		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.605	J	1.01	0.0679	1
07914	Boron	7440-42-8	1.60	J	10.1	0.851	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0770	1
01650	Calcium	7440-70-2	2,920		20.3	3.38	1
06951	Chromium	7440-47-3	17.4		3.04	0.162	1
06952	Cobalt	7440-48-4	4.55		1.01	0.100	1
06953	Copper	7440-50-8	17.0		2.03	0.294	1
01654	Iron	7439-89-6	20,100		40.5	3.67	1
06955	Lead	7439-92-1	6.20		3.04	0.507	1
01656	Lithium	7439-93-2	23.6		4.1	0.34	1
01657	Magnesium	7439-95-4	4,430		10.1	1.69	1
06958	Manganese	7439-96-5	294		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.321	J	2.03	0.172	1
06961	Nickel	7440-02-0	10.9		2.03	0.132	1
10145	Phosphorus	7723-14-0	387		10.1	2.93	1
01662	Potassium	7440-09-7	3,420		101	8.45	1
01667	Sodium	7440-23-5	88.1	J	101	16.9	1
06969	Tin	7440-31-5	2.94	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,290		1.01	0.172	1
06971	Vanadium	7440-62-2	35.6		1.01	0.132	1
06972	Zinc	7440-66-6	60.5		4.05	0.203	1
10146	Zirconium	7440-67-7	3.14	J	5.07	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0282	J	0.203	0.0263	2
06144	Strontium	7440-24-6	17.2		0.405	0.0689	2
06145	Thallium	7440-28-0	0.263		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0108	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.89		0.0100	0.0100	1
	The pH was measured in water at 19.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0707	1
11031	12378-PeCDD	40321-76-4	0.228	JBQ	5.12	0.0601	1
11031	123478-HxCDD	39227-28-6	0.309	JBQ	5.12	0.0580	1
11031	123678-HxCDD	57653-85-7	1.25	JB	5.12	0.0616	1
11031	123789-HxCDD	19408-74-3	0.637	JB	5.12	0.0581	1
11031	1234678-HpCDD	35822-46-9	41.6	B	5.12	0.114	1
11031	OCDD	3268-87-9	857	B	10.2	0.127	1
11031	2378-TCDF	51207-31-9	0.121	J	1.02	0.0792	1
11031	12378-PeCDF	57117-41-6	0.311	JB	5.12	0.0419	1
11031	23478-PeCDF	57117-31-4	0.266	JB	5.12	0.0381	1
11031	123478-HxCDF	70648-26-9	0.804	JB	5.12	0.0621	1
11031	123678-HxCDF	57117-44-9	0.466	JB	5.12	0.0588	1
11031	123789-HxCDF	72918-21-9	0.624	JB	5.12	0.0664	1
11031	234678-HxCDF	60851-34-5	0.547	JB	5.12	0.0589	1
11031	1234678-HpCDF	67562-39-4	12.0	B	5.12	0.0384	1
11031	1234789-HpCDF	55673-89-7	1.16	JB	5.12	0.0494	1
11031	OCDF	39001-02-0	24.7	B	10.2	0.0693	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.35				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	56	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 05:50	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 14:48	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 08:38	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/12/2013 18:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:26	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:49	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:49	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-584-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293060
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

58400 SDG#: PH134-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:49	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:49	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:05	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	17	U	17	3	1
10726	Acenaphthylene	208-96-8	17	U	17	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	17	U	17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	17	U	17	3	1
10726	Benzo(a)pyrene	50-32-8	17	U	17	3	1
10726	Benzo(b)fluoranthene	205-99-2	17	U	17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	17	U	17	3	1
10726	Benzo(k)fluoranthene	207-08-9	17	U	17	3	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	170	U	170	68	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	68	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	33	U	33	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	17	U	17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	17	U	17	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	68	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	68	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	670	U	670	300	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	170	U	170	68	1
10726	Fluoranthene	206-44-0	17	U	17	3	1
10726	Fluorene	86-73-7	17	U	17	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	17	U	17	3	1
10726	2-Methylnaphthalene	91-57-6	17	U	17	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	17	U	17	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	68	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	68	1
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenanthrene	85-01-8	17	U	17	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	17	U	17	3	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.43	J	1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Benzo(a)anthracene	56-55-3	1.2	J	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.3	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	0.88	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.3	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	2.2		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	8.1	J	18	6.1	1
12969	Fluoranthene	206-44-0	2.9		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Morpholine	110-91-8	20	U	20	20	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.4	J	1.7	0.68	1
12969	Pyrene	129-00-0	2.4		1.7	0.68	1
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	20,000	U	20,000	12,000	1
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	12		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	32		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	3.16	J	4.08	0.714	1
06946	Barium	7440-39-3	88.9		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.619	J	1.02	0.0684	1
07914	Boron	7440-42-8	2.03	J	10.2	0.857	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	2,630		20.4	3.41	1
06951	Chromium	7440-47-3	33.2		3.06	0.163	1
06952	Cobalt	7440-48-4	4.21		1.02	0.101	1
06953	Copper	7440-50-8	18.3		2.04	0.296	1
01654	Iron	7439-89-6	19,600		40.8	3.69	1
06955	Lead	7439-92-1	7.49		3.06	0.510	1
01656	Lithium	7439-93-2	23.4		4.1	0.35	1
01657	Magnesium	7439-95-4	4,030		10.2	1.70	1
06958	Manganese	7439-96-5	292		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.439	J	2.04	0.173	1
06961	Nickel	7440-02-0	10.3		2.04	0.133	1
10145	Phosphorus	7723-14-0	300		10.2	2.95	1
01662	Potassium	7440-09-7	3,200		102	8.51	1
01667	Sodium	7440-23-5	96.9	J	102	17.0	1
06969	Tin	7440-31-5	3.10	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,090		1.02	0.173	1
06971	Vanadium	7440-62-2	32.8		1.02	0.133	1
06972	Zinc	7440-66-6	116		4.08	0.204	1
10146	Zirconium	7440-67-7	2.64	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.184	J	0.408	0.102	2
06142	Silver	7440-22-4	13.6		0.204	0.0265	2
06144	Strontium	7440-24-6	19.8		0.408	0.0694	2
06145	Thallium	7440-28-0	0.229		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0398		0.0166	0.010	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1.1		0.42	0.15	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.04		0.0100	0.0100	1
	The pH was measured in water at 19.8 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.301 J	1.01	0.0599	1
11031	12378-PeCDD	40321-76-4	0.914 JB	5.07	0.0607	1
11031	123478-HxCDD	39227-28-6	1.46 JB	5.07	0.0435	1
11031	123678-HxCDD	57653-85-7	8.18 B	5.07	0.0456	1
11031	123789-HxCDD	19408-74-3	3.15 JB	5.07	0.0438	1
11031	1234678-HpCDD	35822-46-9	273 B	5.07	0.152	1
11031	OCDD	3268-87-9	10,200 EB	10.1	0.160	1
11031	2378-TCDF	51207-31-9	0.314 J	1.01	0.0792	1
11031	12378-PeCDF	57117-41-6	0.497 JB	5.07	0.0338	1
11031	23478-PeCDF	57117-31-4	0.580 JB	5.07	0.0320	1
11031	123478-HxCDF	70648-26-9	1.55 JB	5.07	0.0510	1
11031	123678-HxCDF	57117-44-9	1.42 JB	5.07	0.0480	1
11031	123789-HxCDF	72918-21-9	0.585 JBQ	5.07	0.0584	1
11031	234678-HxCDF	60851-34-5	1.98 JB	5.07	0.0496	1
11031	1234678-HpCDF	67562-39-4	35.5 B	5.07	0.0297	1
11031	1234789-HpCDF	55673-89-7	4.62 JB	5.07	0.0405	1
11031	OCDF	39001-02-0	91.9 B	10.1	0.0606	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	9.41			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	57	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	48	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13338SLJ026	12/09/2013 15:09	Linda M Hartenstine	1
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 08:05	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13338SLJ026	12/05/2013 09:00	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133360002A	12/03/2013 22:58	Jessica L Miller	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 15:06	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133360002A	12/02/2013 15:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 10:05	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 00:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293061
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:02	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:35	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:35	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:35	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:35	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:07	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13345243201A	12/12/2013 17:33	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,500		17	3	1
10726	Acenaphthylene	208-96-8	1,700		17	3	1
10726	Aniline	62-53-3	1,100		340	170	1
10726	Anthracene	120-12-7	1,600		17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	1,800		17	3	1
10726	Benzo(a)pyrene	50-32-8	1,700		17	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,800		17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,700		17	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,800		17	3	1
10726	Benzoic acid	65-85-0	2,200		510	170	1
10726	Benzyl alcohol	100-51-6	1,600		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,500		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,600		34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	1,600		170	68	1
10726	Di-n-butylphthalate	84-74-2	1,500		170	68	1
10726	Carbazole	86-74-8	1,600		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,500		34	17	1
10726	4-Chloroaniline	106-47-8	930		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,400		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,600		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,700		33	7	1
10726	2-Chlorophenol	95-57-8	1,900		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,500		34	17	1
10726	Chrysene	218-01-9	1,700		17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		17	3	1
10726	Dibenzofuran	132-64-9	1,600		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,600		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,500		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	930		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,700		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,600		170	68	1
10726	2,4-Dimethylphenol	105-67-9	1,600		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,600		170	34	1
10726	Dimethylphthalate	131-11-3	1,600		170	68	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,300		510	170	1
10726	2,4-Dinitrophenol	51-28-5	2,000		670	300	1
10726	1,2-Diphenylhydrazine	122-66-7	1,700		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		170	68	1
10726	Fluoranthene	206-44-0	1,800		17	3	1
10726	Fluorene	86-73-7	1,600		17	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	1,500		17	3	1
10726	Hexachlorobutadiene	87-68-3	1,500		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	3,600		510	170	1
10726	Hexachloroethane	67-72-1	1,500		170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700		17	3	1
10726	Isophorone	78-59-1	1,600		34	17	1
10726	1-Methylnaphthalene	90-12-0	1,700		17	3	1
10726	2-Methylnaphthalene	91-57-6	1,500		17	3	1
10726	2-Methylphenol	95-48-7	1,700		34	17	1
10726	4-Methylphenol	106-44-5	1,600		34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,500		17	3	1
10726	NDPA as diphenylamine	n.a.	1,700		170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,600		34	17	1
10726	3-Nitroaniline	99-09-2	1,500		170	68	1
10726	4-Nitroaniline	100-01-6	1,400		170	68	1
10726	Nitrobenzene	98-95-3	1,600		34	17	1
10726	2-Nitrophenol	88-75-5	1,600		34	17	1
10726	4-Nitrophenol	100-02-7	1,500		510	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,300		170	68	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,600		34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,700		34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	1,700		170	68	1
10726	Pentachlorophenol	87-86-5	1,300		170	34	1
10726	Phenanthrene	85-01-8	1,800		17	3	1
10726	Phenol	108-95-2	1,600		34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	1,900		17	3	1
10726	Pyridine	110-86-1	720		170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	1,500		34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,600		34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,600		34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	34		1.7	0.68	1
12969	Acenaphthylene	208-96-8	33		1.7	0.34	1
12969	Anthracene	120-12-7	55		1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Benzo(a)anthracene	56-55-3	110		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	98		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	120		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	78		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	45		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	84		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	39		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	38		18	6.1	1
12969	Chrysene	218-01-9	110		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	33		1.7	0.68	1
12969	Diethylphthalate	84-66-2	35		18	6.1	1
12969	Dimethylphthalate	131-11-3	33		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	50		18	6.1	1
12969	Fluoranthene	206-44-0	230		1.7	0.68	1
12969	Fluorene	86-73-7	35		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	50		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	33		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	35		1.7	0.68	1
12969	Morpholine	110-91-8	20	U	20	20	1
12969	Naphthalene	91-20-3	33		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	30		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	45		18	6.1	1
12969	Phenanthrene	85-01-8	120		1.7	0.68	1
12969	Pyrene	129-00-0	180		1.7	0.68	1
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	95,000		20,000	12,000	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	190		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3		5.1	2.0	1
12952	EFH (C15-C20)	n.a.	9.3		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	23		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	40		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.3	J	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500	40.8	7.36	1
06944	Antimony	7440-36-0	34.7	4.08	0.755	1
06935	Arsenic	7440-38-2	18.9	4.08	0.714	1
06946	Barium	7440-39-3	292	1.02	0.0337	1
06947	Beryllium	7440-41-7	5.85	1.02	0.0684	1
07914	Boron	7440-42-8	197	10.2	0.857	1
06949	Cadmium	7440-43-9	4.83	1.02	0.0776	1
01650	Calcium	7440-70-2	3,140	20.4	3.41	1
06951	Chromium	7440-47-3	51.9	3.06	0.163	1
06952	Cobalt	7440-48-4	52.4	1.02	0.101	1
06953	Copper	7440-50-8	46.2	2.04	0.296	1
01654	Iron	7439-89-6	19,300	40.8	3.69	1
06955	Lead	7439-92-1	21.9	3.06	0.510	1
01656	Lithium	7439-93-2	128	4.1	0.35	1
01657	Magnesium	7439-95-4	4,350	10.2	1.70	1
06958	Manganese	7439-96-5	345	1.02	0.0847	1
06960	Molybdenum	7439-98-7	197	2.04	0.173	1
06961	Nickel	7440-02-0	60.4	2.04	0.133	1
10145	Phosphorus	7723-14-0	392	10.2	2.95	1
01662	Potassium	7440-09-7	4,550	102	8.51	1
01667	Sodium	7440-23-5	1,140	102	17.0	1
06969	Tin	7440-31-5	372	10.2	0.224	1
06970	Titanium	7440-32-6	1,380	1.02	0.173	1
06971	Vanadium	7440-62-2	87.1	1.02	0.133	1
06972	Zinc	7440-66-6	149	4.08	0.204	1
10146	Zirconium	7440-67-7	101	5.10	0.857	1
	SW-846 6020A		**mg/kg**	**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	2.22	0.408	0.102	2
06142	Silver	7440-22-4	24.7	0.204	0.0265	2
06144	Strontium	7440-24-6	28.1	0.408	0.0694	2
06145	Thallium	7440-28-0	0.700	0.204	0.0306	2
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.240	0.0168	0.0101	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.6		0.993	0.0535	1
11031	12378-PeCDD	40321-76-4	92.4	B	4.96	0.0483	1
11031	123478-HxCDD	39227-28-6	98.0	B	4.96	0.0507	1
11031	123678-HxCDD	57653-85-7	103	B	4.96	0.0510	1
11031	123789-HxCDD	19408-74-3	97.9	B	4.96	0.0506	1
11031	1234678-HpCDD	35822-46-9	240	B	4.96	0.0982	1
11031	OCDD	3268-87-9	4,010	EB	9.93	0.128	1
11031	2378-TCDF	51207-31-9	18.5		0.993	0.0669	1
11031	12378-PeCDF	57117-41-6	96.9	B	4.96	0.0306	1
11031	23478-PeCDF	57117-31-4	98.9	B	4.96	0.0292	1
11031	123478-HxCDF	70648-26-9	102	B	4.96	0.0581	1
11031	123678-HxCDF	57117-44-9	102	B	4.96	0.0544	1
11031	123789-HxCDF	72918-21-9	101	B	4.96	0.0616	1
11031	234678-HxCDF	60851-34-5	102	B	4.96	0.0570	1
11031	1234678-HpCDF	67562-39-4	119	B	4.96	0.0359	1
11031	1234789-HpCDF	55673-89-7	103	B	4.96	0.0445	1
11031	OCDF	39001-02-0	239	B	9.93	0.0601	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	60	23 - 140
13C12-OCDD	53	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	57	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13338SLJ026	12/09/2013 15:33	Linda M Hartenstine	1
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 08:38	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13338SLJ026	12/05/2013 09:00	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133360002A	12/03/2013 23:14	Jessica L Miller	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 15:24	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133360002A	12/02/2013 15:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 10:26	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 01:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293062
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:14	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:42	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:42	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:42	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:42	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:13	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	1,400		17	3	1
10726	Acenaphthylene	208-96-8	1,700		17	3	1
10726	Aniline	62-53-3	1,000		340	170	1
10726	Anthracene	120-12-7	1,600		17	3	1
10726	Benzidine	92-87-5	1,400	J	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	1,600		17	3	1
10726	Benzo(a)pyrene	50-32-8	1,600		17	3	1
10726	Benzo(b)fluoranthene	205-99-2	1,600		17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	1,800		17	3	1
10726	Benzo(k)fluoranthene	207-08-9	1,700		17	3	1
10726	Benzoic acid	65-85-0	1,600		510	170	1
10726	Benzyl alcohol	100-51-6	1,500		340	170	1
10726	1,1'-Biphenyl	92-52-4	1,500		34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	1,700		34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	1,700		170	68	1
10726	Di-n-butylphthalate	84-74-2	1,600		170	68	1
10726	Carbazole	86-74-8	1,500		34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	1,500		34	17	1
10726	4-Chloroaniline	106-47-8	640		34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	1,400		34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	1,400		34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	1,700		34	7	1
10726	2-Chlorophenol	95-57-8	1,800		34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	1,500		34	17	1
10726	Chrysene	218-01-9	1,600		17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	1,700		17	3	1
10726	Dibenzofuran	132-64-9	1,500		34	17	1
10726	1,2-Dichlorobenzene	95-50-1	1,700		34	17	1
10726	1,3-Dichlorobenzene	541-73-1	1,600		34	17	1
10726	1,4-Dichlorobenzene	106-46-7	1,500		34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	810		340	100	1
10726	2,4-Dichlorophenol	120-83-2	1,600		34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	1,500		170	68	1
10726	2,4-Dimethylphenol	105-67-9	1,500		34	17	1
10726	3,5-Dimethylphenol	108-68-9	1,600		170	34	1
10726	Dimethylphthalate	131-11-3	1,500		170	68	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	1,300		510	170	1
10726	2,4-Dinitrophenol	51-28-5	1,700		670	310	1
10726	1,2-Diphenylhydrazine	122-66-7	1,700		34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		170	68	1
10726	Fluoranthene	206-44-0	1,500		17	3	1
10726	Fluorene	86-73-7	1,400		17	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	1,500		17	3	1
10726	Hexachlorobutadiene	87-68-3	1,400		34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	3,300		510	170	1
10726	Hexachloroethane	67-72-1	1,500		170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	1,700		17	3	1
10726	Isophorone	78-59-1	1,500		34	17	1
10726	1-Methylnaphthalene	90-12-0	1,600		17	3	1
10726	2-Methylnaphthalene	91-57-6	1,500		17	3	1
10726	2-Methylphenol	95-48-7	1,700		34	17	1
10726	4-Methylphenol	106-44-5	1,500		34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	1,400		17	3	1
10726	NDPA as diphenylamine	n.a.	1,700		170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	1,500		34	17	1
10726	3-Nitroaniline	99-09-2	1,400		170	68	1
10726	4-Nitroaniline	100-01-6	1,300		170	68	1
10726	Nitrobenzene	98-95-3	1,500		34	17	1
10726	2-Nitrophenol	88-75-5	1,500		34	17	1
10726	4-Nitrophenol	100-02-7	1,400		510	170	1
10726	N-Nitrosodimethylamine	62-75-9	1,300		170	68	1
10726	N-Nitroso-di-n-propylamine	621-64-7	1,600		34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	1,800		34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	1,700		170	68	1
10726	Pentachlorophenol	87-86-5	1,400		170	34	1
10726	Phenanthrene	85-01-8	1,600		17	3	1
10726	Phenol	108-95-2	1,500		34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	1,700		17	3	1
10726	Pyridine	110-86-1	690		170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	1,500		34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	1,500		34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	1,600		34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	34		1.7	0.68	1
12969	Acenaphthylene	208-96-8	34		1.7	0.34	1
12969	Anthracene	120-12-7	46		1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Benzo(a)anthracene	56-55-3	130		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	120		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	150		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	86		17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	50		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	85		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	41		18	6.1	1
12969	Di-n-butylphthalate	84-74-2	38		18	6.1	1
12969	Chrysene	218-01-9	130		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	35		1.7	0.68	1
12969	Diethylphthalate	84-66-2	37		18	6.1	1
12969	Dimethylphthalate	131-11-3	34		18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	45		18	6.1	1
12969	Fluoranthene	206-44-0	210		1.7	0.68	1
12969	Fluorene	86-73-7	35		1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	54		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	32		1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	33		1.7	0.68	1
12969	Morpholine	110-91-8	20	U	20	20	1
12969	Naphthalene	91-20-3	32		1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	31		1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	46		18	6.1	1
12969	Phenanthrene	85-01-8	83		1.7	0.68	1
12969	Pyrene	129-00-0	170		1.7	0.68	1
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	94,000		20,000	12,000	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	170		17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	200		17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2		5.1	2.0	1
12952	EFH (C15-C20)	n.a.	9.8		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	27		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	45		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.4	J	5.1	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,800	40.8	7.36	1
06944	Antimony	7440-36-0	33.7	4.08	0.755	1
06935	Arsenic	7440-38-2	18.9	4.08	0.714	1
06946	Barium	7440-39-3	294	1.02	0.0337	1
06947	Beryllium	7440-41-7	5.85	1.02	0.0684	1
07914	Boron	7440-42-8	195	10.2	0.857	1
06949	Cadmium	7440-43-9	4.80	1.02	0.0776	1
01650	Calcium	7440-70-2	3,260	20.4	3.41	1
06951	Chromium	7440-47-3	51.7	3.06	0.163	1
06952	Cobalt	7440-48-4	52.6	1.02	0.101	1
06953	Copper	7440-50-8	46.9	2.04	0.296	1
01654	Iron	7439-89-6	20,000	40.8	3.69	1
06955	Lead	7439-92-1	22.1	3.06	0.510	1
01656	Lithium	7439-93-2	128	4.1	0.35	1
01657	Magnesium	7439-95-4	4,460	10.2	1.70	1
06958	Manganese	7439-96-5	358	1.02	0.0847	1
06960	Molybdenum	7439-98-7	197	2.04	0.173	1
06961	Nickel	7440-02-0	60.6	2.04	0.133	1
10145	Phosphorus	7723-14-0	407	10.2	2.95	1
01662	Potassium	7440-09-7	4,610	102	8.51	1
01667	Sodium	7440-23-5	1,140	102	17.0	1
06969	Tin	7440-31-5	370	10.2	0.224	1
06970	Titanium	7440-32-6	1,460	1.02	0.173	1
06971	Vanadium	7440-62-2	87.8	1.02	0.133	1
06972	Zinc	7440-66-6	151	4.08	0.204	1
10146	Zirconium	7440-67-7	99.5	5.10	0.857	1
	SW-846 6020A		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	2.27	0.408	0.102	2
06142	Silver	7440-22-4	24.3	0.204	0.0265	2
06144	Strontium	7440-24-6	28.5	0.408	0.0694	2
06145	Thallium	7440-28-0	0.682	0.204	0.0306	2
	SW-846 7471B		mg/kg	mg/kg	mg/kg	
00159	3a Mercury 7471A	7439-97-6	0.220	0.0162	0.0097	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	17.6	0.998	0.0651	1
11031	12378-PeCDD	40321-76-4	94.2 B	4.99	0.0545	1
11031	123478-HxCDD	39227-28-6	98.3 B	4.99	0.0526	1
11031	123678-HxCDD	57653-85-7	108 B	4.99	0.0545	1
11031	123789-HxCDD	19408-74-3	101 B	4.99	0.0496	1
11031	1234678-HpCDD	35822-46-9	379 B	4.99	0.156	1
11031	OCDD	3268-87-9	12,900 EB	9.98	0.218	1
11031	2378-TCDF	51207-31-9	18.9	0.998	0.0817	1
11031	12378-PeCDF	57117-41-6	100 B	4.99	0.0396	1
11031	23478-PeCDF	57117-31-4	99.9 B	4.99	0.0371	1
11031	123478-HxCDF	70648-26-9	104 B	4.99	0.0641	1
11031	123678-HxCDF	57117-44-9	102 B	4.99	0.0619	1
11031	123789-HxCDF	72918-21-9	102 B	4.99	0.0670	1
11031	234678-HxCDF	60851-34-5	103 B	4.99	0.0605	1
11031	1234678-HpCDF	67562-39-4	142 B	4.99	0.0458	1
11031	1234789-HpCDF	55673-89-7	105 B	4.99	0.0597	1
11031	OCDF	39001-02-0	292 B	9.98	0.0615	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	60	26 - 138

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Labeled Compounds		**%Rec**	**Windows**			
13C12-OCDF		50	17 - 157			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13338SLJ026	12/09/2013 15:57	Linda M Hartenstine	1
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 09:12	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13338SLJ026	12/05/2013 09:00	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133360002A	12/03/2013 23:22	Jessica L Miller	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 15:43	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133360002A	12/02/2013 15:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 10:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 02:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5MSD Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293063
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:18	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:44	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:44	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:44	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:44	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:15	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5SS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293064
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02SS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	35.8	2.0	0.70	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13345243201A	12/12/2013 17:48	Clinton M Wilson	5
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5IS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293065
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02IS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	806	39.4	13.8	100
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13345243201A	12/12/2013 18:27	Clinton M Wilson	100
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5PDS Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293066
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02PDS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	42.9	4.2	1.5	10
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13345243201A	12/12/2013 18:43	Clinton M Wilson	10
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293067
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	2.95	J	4.08	0.714	1
06946	Barium	7440-39-3	87.3		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.588	J	1.02	0.0684	1
07914	Boron	7440-42-8	1.77	J	10.2	0.857	1
06949	Cadmium	7440-43-9	1.02	U	1.02	0.0776	1
01650	Calcium	7440-70-2	2,610		20.4	3.41	1
06951	Chromium	7440-47-3	31.5		3.06	0.163	1
06952	Cobalt	7440-48-4	4.24		1.02	0.101	1
06953	Copper	7440-50-8	18.8		2.04	0.296	1
01654	Iron	7439-89-6	18,800		40.8	3.69	1
06955	Lead	7439-92-1	7.07		3.06	0.510	1
01656	Lithium	7439-93-2	22.7		4.1	0.35	1
01657	Magnesium	7439-95-4	3,870		10.2	1.70	1
06958	Manganese	7439-96-5	295		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.388	J	2.04	0.173	1
06961	Nickel	7440-02-0	10.3		2.04	0.133	1
10145	Phosphorus	7723-14-0	313		10.2	2.95	1
01662	Potassium	7440-09-7	3,170		102	8.51	1
01667	Sodium	7440-23-5	95.4	J	102	17.0	1
06969	Tin	7440-31-5	2.85	J	10.2	0.224	1
06970	Titanium	7440-32-6	1,090		1.02	0.173	1
06971	Vanadium	7440-62-2	31.9		1.02	0.133	1
06972	Zinc	7440-66-6	104		4.08	0.204	1
10146	Zirconium	7440-67-7	2.84	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.181	J	0.408	0.102	2
06142	Silver	7440-22-4	15.3		0.204	0.0265	2
06144	Strontium	7440-24-6	20.0		0.408	0.0694	2
06145	Thallium	7440-28-0	0.229		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0428		0.0165	0.0099	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	1.9		0.39	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.01		0.0100	0.0100	1
	The pH was measured in water at 20 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	1.7		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293067
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:10	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:40	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:40	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:40	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:40	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-0.0-0.5DUP Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293067
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:10

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71500 SDG#: PH134-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:11	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	2	13345243201A	12/12/2013 18:59	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	18	U	18	3	1
10726	Acenaphthylene	208-96-8	18	U	18	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	18	U	18	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	720	1
10726	Benzo(a)anthracene	56-55-3	14	J	18	3	1
10726	Benzo(a)pyrene	50-32-8	11	J	18	3	1
10726	Benzo(b)fluoranthene	205-99-2	11	J	18	3	1
10726	Benzo(g,h,i)perylene	191-24-2	18	U	18	3	1
10726	Benzo(k)fluoranthene	207-08-9	8	J	18	3	1
10726	Benzoic acid	65-85-0	520	U	520	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	2-butoxy-Ethanol	111-76-2	180	U	180	180	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	170	U	170	69	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	69	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	11	J	18	3	1
10726	Dibenz(a,h)anthracene	53-70-3	18	U	18	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	69	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	69	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	520	U	520	170	1
10726	2,4-Dinitrophenol	51-28-5	680	U	680	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	69	1
10726	Fluoranthene	206-44-0	14	J	18	3	1
10726	Fluorene	86-73-7	18	U	18	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Hexachlorobenzene	118-74-1	18	U	18	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	520	U	520	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	18	U	18	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	18	U	18	3	1
10726	2-Methylnaphthalene	91-57-6	18	U	18	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	18	U	18	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	69	1
10726	4-Nitroaniline	100-01-6	170	U	170	69	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	520	U	520	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	69	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	69	1
10726	Pentachlorophenol	87-86-5	180	U	180	34	1
10726	Phenanthrene	85-01-8	4	J	18	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	2-phenoxy-Ethanol	122-99-6	180	U	180	180	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	14	J	18	3	1
10726	Pyridine	110-86-1	170	U	170	69	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.94	J	1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Benzo(a)anthracene	56-55-3	7.8		1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	6.9		1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	10		1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	5.2	J	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	4.3		1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	5.2		1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	8.6		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.3	J	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	13		1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	4.0		1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Morpholine	110-91-8	21	U	21	21	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	3.4		1.7	0.69	1
12969	Pyrene	129-00-0	11		1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	27.29
Aldehydes & Ketones	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	
13031	Formaldehyde	50-00-0	2,100	U	2,100	1,200	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.0	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	26		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,600		40.6	7.31	1
06944	Antimony	7440-36-0	4.06	U	4.06	0.750	1
06935	Arsenic	7440-38-2	3.91	J	4.06	0.710	1
06946	Barium	7440-39-3	61.2		1.01	0.0335	1
06947	Beryllium	7440-41-7	0.619	J	1.01	0.0679	1
07914	Boron	7440-42-8	10.1	U	10.1	0.852	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0771	1
01650	Calcium	7440-70-2	2,160		20.3	3.39	1
06951	Chromium	7440-47-3	21.9		3.04	0.162	1
06952	Cobalt	7440-48-4	3.93		1.01	0.100	1
06953	Copper	7440-50-8	15.9		2.03	0.294	1
01654	Iron	7439-89-6	19,700		40.6	3.67	1
06955	Lead	7439-92-1	5.95		3.04	0.507	1
01656	Lithium	7439-93-2	15.5		4.1	0.34	1
01657	Magnesium	7439-95-4	3,840		10.1	1.69	1
06958	Manganese	7439-96-5	231		1.01	0.0841	1
06960	Molybdenum	7439-98-7	0.322	J	2.03	0.172	1
06961	Nickel	7440-02-0	9.14		2.03	0.132	1
10145	Phosphorus	7723-14-0	121		10.1	2.93	1
01662	Potassium	7440-09-7	2,070		101	8.46	1
01667	Sodium	7440-23-5	139		101	16.9	1
06969	Tin	7440-31-5	2.97	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,090		1.01	0.172	1
06971	Vanadium	7440-62-2	30.1		1.01	0.132	1
06972	Zinc	7440-66-6	65.5		4.06	0.203	1
10146	Zirconium	7440-67-7	2.73	J	5.07	0.852	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.107	J	0.406	0.101	2
06142	Silver	7440-22-4	2.02		0.203	0.0264	2
06144	Strontium	7440-24-6	17.5		0.406	0.0689	2
06145	Thallium	7440-28-0	0.218		0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0172	U	0.0172	0.0103	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	0.47		0.39	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.11		0.0100	0.0100	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
	The pH was measured in water at 20 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.3	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.296	J	1.02	0.0637	1
11031	12378-PeCDD	40321-76-4	0.950	JB	5.11	0.0588	1
11031	123478-HxCDD	39227-28-6	1.49	JB	5.11	0.0537	1
11031	123678-HxCDD	57653-85-7	6.95	B	5.11	0.0571	1
11031	123789-HxCDD	19408-74-3	2.83	JB	5.11	0.0509	1
11031	1234678-HpCDD	35822-46-9	231	B	5.11	0.147	1
11031	OCDD	3268-87-9	5,390	EB	10.2	0.227	1
11031	2378-TCDF	51207-31-9	0.417	J	1.02	0.0876	1
11031	12378-PeCDF	57117-41-6	0.545	JB	5.11	0.0385	1
11031	23478-PeCDF	57117-31-4	0.616	JB	5.11	0.0359	1
11031	123478-HxCDF	70648-26-9	1.39	JB	5.11	0.0582	1
11031	123678-HxCDF	57117-44-9	1.20	JB	5.11	0.0567	1
11031	123789-HxCDF	72918-21-9	0.562	JB	5.11	0.0543	1
11031	234678-HxCDF	60851-34-5	1.60	JB	5.11	0.0544	1
11031	1234678-HpCDF	67562-39-4	28.6	B	5.11	0.0361	1
11031	1234789-HpCDF	55673-89-7	2.95	JB	5.11	0.0450	1
11031	OCDF	39001-02-0	88.7	B	10.2	0.0713	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	7.36				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	54	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	49	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13338SLJ026	12/09/2013 16:21	Linda M Hartenstine	1
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 06:24	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13338SLJ026	12/05/2013 09:00	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/05/2013 20:47	Laura M Krieger	27.29
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333033272	11/26/2013 20:30	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333033272	11/26/2013 20:31	Lisa J Cooke	n.a.
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133360002A	12/03/2013 23:29	Jessica L Miller	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 16:01	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133360002A	12/02/2013 15:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 11:09	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 02:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-715-SA5A-SB-6.0-7.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293068
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 11:50

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71567 SDG#: PH134-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:30	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:51	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:51	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:51	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:51	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:17	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13345243201A	12/12/2013 19:07	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthene	83-32-9	17	U	17	3	1
10726	Acenaphthylene	208-96-8	17	U	17	3	1
10726	Aniline	62-53-3	340	U	340	170	1
10726	Anthracene	120-12-7	17	U	17	3	1
10726	Benzidine	92-87-5	1,700	U	1,700	710	1
10726	Benzo(a)anthracene	56-55-3	9	J	17	3	1
10726	Benzo(a)pyrene	50-32-8	13	J	17	3	1
10726	Benzo(b)fluoranthene	205-99-2	16	J	17	3	1
10726	Benzo(g,h,i)perylene	191-24-2	17	U	17	3	1
10726	Benzo(k)fluoranthene	207-08-9	9	J	17	3	1
10726	Benzoic acid	65-85-0	510	U	510	170	1
10726	Benzyl alcohol	100-51-6	340	U	340	170	1
10726	1,1'-Biphenyl	92-52-4	34	U	34	17	1
10726	4-Bromophenyl-phenylether	101-55-3	34	U	34	17	1
10726	2-butoxy-Ethanol	111-76-2	170	U	170	170	1
	2-butoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Butylbenzylphthalate	85-68-7	170	U	170	68	1
10726	Di-n-butylphthalate	84-74-2	170	U	170	68	1
10726	Carbazole	86-74-8	34	U	34	17	1
10726	4-Chloro-3-methylphenol	59-50-7	34	U	34	17	1
10726	4-Chloroaniline	106-47-8	34	U	34	17	1
10726	bis(2-Chloroethoxy)methane	111-91-1	34	U	34	17	1
10726	bis(2-Chloroethyl)ether	111-44-4	34	U	34	17	1
10726	bis(2-Chloroisopropyl)ether	39638-32-9	34	U	34	17	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10726	2-Chloronaphthalene	91-58-7	34	U	34	7	1
10726	2-Chlorophenol	95-57-8	34	U	34	17	1
10726	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	17	1
10726	Chrysene	218-01-9	13	J	17	3	1
10726	Dibenz(a,h)anthracene	53-70-3	17	U	17	3	1
10726	Dibenzofuran	132-64-9	34	U	34	17	1
10726	1,2-Dichlorobenzene	95-50-1	34	U	34	17	1
10726	1,3-Dichlorobenzene	541-73-1	34	U	34	17	1
10726	1,4-Dichlorobenzene	106-46-7	34	U	34	17	1
10726	3,3'-Dichlorobenzidine	91-94-1	340	U	340	100	1
10726	2,4-Dichlorophenol	120-83-2	34	U	34	17	1
10726	2,6-Dichlorophenol	87-65-0	34	U	34	17	1
10726	Diethylphthalate	84-66-2	170	U	170	68	1
10726	2,4-Dimethylphenol	105-67-9	34	U	34	17	1
10726	3,5-Dimethylphenol	108-68-9	170	U	170	34	1
10726	Dimethylphthalate	131-11-3	170	U	170	68	1
10726	4,6-Dinitro-2-methylphenol	534-52-1	510	U	510	170	1
10726	2,4-Dinitrophenol	51-28-5	670	U	670	310	1
10726	1,2-Diphenylhydrazine	122-66-7	34	U	34	17	1
10726	bis(2-Ethylhexyl)phthalate	117-81-7	170	U	170	68	1
10726	Fluoranthene	206-44-0	22		17	3	1
10726	Fluorene	86-73-7	17	U	17	3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270D			ug/kg		ug/kg	ug/kg	
10726	Hexachlorobenzene	118-74-1	17	U	17	3	1
10726	Hexachlorobutadiene	87-68-3	34	U	34	17	1
10726	Hexachlorocyclopentadiene	77-47-4	510	U	510	170	1
10726	Hexachloroethane	67-72-1	170	U	170	34	1
10726	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	3	1
10726	Isophorone	78-59-1	34	U	34	17	1
10726	1-Methylnaphthalene	90-12-0	17	U	17	3	1
10726	2-Methylnaphthalene	91-57-6	17	U	17	3	1
10726	2-Methylphenol	95-48-7	34	U	34	17	1
10726	4-Methylphenol	106-44-5	34	U	34	17	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10726	Naphthalene	91-20-3	17	U	17	3	1
10726	NDPA as diphenylamine	n.a.	170	U	170	34	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	2-Nitroaniline	88-74-4	34	U	34	17	1
10726	3-Nitroaniline	99-09-2	170	U	170	68	1
10726	4-Nitroaniline	100-01-6	170	U	170	68	1
10726	Nitrobenzene	98-95-3	34	U	34	17	1
10726	2-Nitrophenol	88-75-5	34	U	34	17	1
10726	4-Nitrophenol	100-02-7	510	U	510	170	1
10726	N-Nitrosodimethylamine	62-75-9	170	U	170	68	1
10726	N-Nitroso-di-n-propylamine	621-64-7	34	U	34	17	1
10726	N-Nitrosodiphenylamine	86-30-6	34	U	34	17	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10726	Di-n-octylphthalate	117-84-0	170	U	170	68	1
10726	Pentachlorophenol	87-86-5	170	U	170	34	1
10726	Phenanthrene	85-01-8	7	J	17	3	1
10726	Phenol	108-95-2	34	U	34	17	1
10726	2-phenoxy-Ethanol	122-99-6	170	U	170	170	1
	2-phenoxy-Ethanol was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	Pyrene	129-00-0	21		17	3	1
10726	Pyridine	110-86-1	170	U	170	68	1
10726	1,2,3,4-Tetrahydronaphthalene	119-64-2	170	U	170	34	1
	1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.						
10726	1,2,4-Trichlorobenzene	120-82-1	34	U	34	17	1
10726	2,4,5-Trichlorophenol	95-95-4	34	U	34	17	1
10726	2,4,6-Trichlorophenol	88-06-2	34	U	34	17	1
GC/MS Semivolatiles SW-846 8270D SIM			ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	2.8		1.7	0.34	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Benzo(a)anthracene	56-55-3	13		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	11		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	16		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	8.4	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	5.9		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	8.2		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	15		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8		1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	J	18	6.1	1
12969	Fluoranthene	206-44-0	28		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	5.7		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Morpholine	110-91-8	21	U	21	21	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	12		1.7	0.68	1
12969	Pyrene	129-00-0	21		1.7	0.68	1
Aldehydes & Ketones	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	
13031	Formaldehyde	50-00-0	2,100	U	2,100	1,200	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	26	U	26	10	5
12952	EFH (C15-C20)	n.a.	26	U	26	10	5
12952	EFH (C21-C30)	n.a.	32		26	10	5
12952	EFH (C30-C40)	n.a.	180		51	20	5
12952	EFH (C8-C11)	n.a.	26	U	26	10	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,000		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	3.56	J	4.02	0.704	1
06946	Barium	7440-39-3	80.6		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.661	J	1.01	0.0674	1
07914	Boron	7440-42-8	10.1	U	10.1	0.845	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0764	1
01650	Calcium	7440-70-2	2,390		20.1	3.36	1
06951	Chromium	7440-47-3	36.5		3.02	0.161	1
06952	Cobalt	7440-48-4	4.03		1.01	0.0995	1
06953	Copper	7440-50-8	18.1		2.01	0.292	1
01654	Iron	7439-89-6	19,800		40.2	3.64	1
06955	Lead	7439-92-1	7.18		3.02	0.503	1
01656	Lithium	7439-93-2	23.7		4.0	0.34	1
01657	Magnesium	7439-95-4	4,040		10.1	1.68	1
06958	Manganese	7439-96-5	244		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.429	J	2.01	0.171	1
06961	Nickel	7440-02-0	9.37		2.01	0.131	1
10145	Phosphorus	7723-14-0	278		10.1	2.91	1
01662	Potassium	7440-09-7	2,630		101	8.39	1
01667	Sodium	7440-23-5	96.4	J	101	16.8	1
06969	Tin	7440-31-5	3.00	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,070		1.01	0.171	1
06971	Vanadium	7440-62-2	32.0		1.01	0.131	1
06972	Zinc	7440-66-6	132		4.02	0.201	1
10146	Zirconium	7440-67-7	2.73	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.208	J	0.402	0.101	2
06142	Silver	7440-22-4	3.03		0.201	0.0261	2
06144	Strontium	7440-24-6	17.2		0.402	0.0684	2
06145	Thallium	7440-28-0	0.241		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0276		0.0160	0.0096	1
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	2a Chromium VI by EPA 7199	18540-29-9	3.1		0.40	0.14	1
	SW-846 9045D modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.93		0.0100	0.0100	1
	The pH was measured in water at 20 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.262 J	1.02	0.0733	1
11031	12378-PeCDD	40321-76-4	1.02 JB	5.11	0.0661	1
11031	123478-HxCDD	39227-28-6	1.75 JB	5.11	0.0586	1
11031	123678-HxCDD	57653-85-7	17.0 B	5.11	0.0598	1
11031	123789-HxCDD	19408-74-3	4.12 JB	5.11	0.0583	1
11031	1234678-HpCDD	35822-46-9	547 B	5.11	0.240	1
11031	OCDD	3268-87-9	29,900 EB	10.2	0.272	1
11031	2378-TCDF	51207-31-9	0.231 J	1.02	0.0872	1
11031	12378-PeCDF	57117-41-6	0.439 JB	5.11	0.0402	1
11031	23478-PeCDF	57117-31-4	0.577 JBQ	5.11	0.0400	1
11031	123478-HxCDF	70648-26-9	2.88 JB	5.11	0.0661	1
11031	123678-HxCDF	57117-44-9	2.82 JB	5.11	0.0636	1
11031	123789-HxCDF	72918-21-9	0.951 JB	5.11	0.0698	1
11031	234678-HxCDF	60851-34-5	4.00 JB	5.11	0.0641	1
11031	1234678-HpCDF	67562-39-4	99.9 B	5.11	0.0464	1
11031	1234789-HpCDF	55673-89-7	13.1 B	5.11	0.0639	1
11031	OCDF	39001-02-0	245 B	10.2	0.0825	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	20.3			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	58	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	59	24 - 185
13C12-23478-PeCDF	55	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	49	26 - 138
13C12-OCDF	45	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	8a SVOCs by EPA 8270D	SW-846 8270D	1	13338SLJ026	12/09/2013 16:45	Linda M Hartenstine	1
12969	7a SVOC SIM 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 06:58	Mark A Clark	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	13338SLJ026	12/05/2013 09:00	Anna E Stager	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13031	25a Formaldehyde by EPA 8315A	SW-846 8315A	1	133360002A	12/03/2013 23:37	Jessica L Miller	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 16:20	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	133360002A	12/02/2013 15:30	Wanda F Oswald	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 12:14	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 03:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-1015-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293069
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 10:02

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

10150 SDG#: PH134-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:41	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 12:58	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 12:58	Parker D Lindstrom	2
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 12:58	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 12:58	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:19	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
05892	2a Chromium VI by EPA 7199	SW-846 7199	1	13345243201A	12/12/2013 19:22	Clinton M Wilson	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
02432	Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	13345243201A	12/11/2013 18:00	Michelle L Lalli	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-112513 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7293070
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 08:00

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

134TB SDG#: PH134-05TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13331B94A	12/02/2013 12:53	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13331B94A	12/02/2013 12:53	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	17	U	17	6.8	10
12969	Acenaphthylene	208-96-8	17	U	17	3.4	10
12969	Anthracene	120-12-7	17	U	17	3.4	10
12969	Benzo(a)anthracene	56-55-3	9.4	J	17	6.8	10
12969	Benzo(a)pyrene	50-32-8	9.2	J	17	6.8	10
12969	Benzo(b)fluoranthene	205-99-2	25		17	6.8	10
12969	Benzo(e)pyrene	192-97-2	170	U	170	34	10
12969	Benzo(g,h,i)perylene	191-24-2	9.2	J	17	6.8	10
12969	Benzo(k)fluoranthene	207-08-9	6.8	J	17	6.8	10
12969	Butylbenzylphthalate	85-68-7	180	U	180	61	10
12969	Di-n-butylphthalate	84-74-2	180	U	180	61	10
12969	Chrysene	218-01-9	26		17	3.4	10
12969	Dibenz(a,h)anthracene	53-70-3	17	U	17	6.8	10
12969	Diethylphthalate	84-66-2	180	U	180	61	10
12969	Dimethylphthalate	131-11-3	180	U	180	61	10
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	64	J	180	61	10
12969	Fluoranthene	206-44-0	28		17	6.8	10
12969	Fluorene	86-73-7	17	U	17	6.8	10
12969	Indeno(1,2,3-cd)pyrene	193-39-5	17	U	17	6.8	10
12969	1-Methylnaphthalene	90-12-0	13	J	17	6.8	10
12969	2-Methylnaphthalene	91-57-6	12	J	17	6.8	10
12969	Naphthalene	91-20-3	7.0	J	17	6.8	10
12969	N-Nitrosodimethylamine	62-75-9	17	U	17	6.8	10
12969	Di-n-octylphthalate	117-84-0	180	U	180	61	10
12969	Phenanthrene	85-01-8	18		17	6.8	10
12969	Pyrene	129-00-0	26		17	6.8	10
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	14	J	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	25	U	25	10	5
12952	EFH (C15-C20)	n.a.	10	J	25	10	5
12952	EFH (C21-C30)	n.a.	83		25	10	5
12952	EFH (C30-C40)	n.a.	300		51	20	5
12952	EFH (C8-C11)	n.a.	25	U	25	10	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		40.5	7.30	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	4.15		4.05	0.709	1
06946	Barium	7440-39-3	87.8		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.643	J	1.01	0.0678	1
07914	Boron	7440-42-8	10.1	U	10.1	0.850	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0769	1
01650	Calcium	7440-70-2	3,090		20.2	3.38	1
06951	Chromium	7440-47-3	22.0		3.04	0.162	1
06952	Cobalt	7440-48-4	5.42		1.01	0.100	1
06953	Copper	7440-50-8	18.1		2.02	0.294	1
01654	Iron	7439-89-6	21,700		40.5	3.66	1
06955	Lead	7439-92-1	20.1		3.04	0.506	1
01656	Lithium	7439-93-2	23.5		4.0	0.34	1
01657	Magnesium	7439-95-4	4,790		10.1	1.69	1
06958	Manganese	7439-96-5	290		1.01	0.0840	1
06960	Molybdenum	7439-98-7	0.379	J	2.02	0.172	1
06961	Nickel	7440-02-0	13.7		2.02	0.132	1
10145	Phosphorus	7723-14-0	505		10.1	2.93	1
01662	Potassium	7440-09-7	3,570		101	8.44	1
01667	Sodium	7440-23-5	91.3	J	101	16.9	1
06969	Tin	7440-31-5	2.90	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,160		1.01	0.172	1
06971	Vanadium	7440-62-2	39.7		1.01	0.132	1
06972	Zinc	7440-66-6	62.1		4.05	0.202	1
10146	Zirconium	7440-67-7	3.50	J	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.164	J	0.405	0.101	2
06142	Silver	7440-22-4	0.0441	J	0.202	0.0263	2
06144	Strontium	7440-24-6	18.1		0.405	0.0688	2
06145	Thallium	7440-28-0	0.238		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	J	0.0168	0.0101	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.94		0.0100	0.0100	1
	The pH was measured in water at 20.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.234	J	0.992	0.0588	1
11031	12378-PeCDD	40321-76-4	0.541	JBQ	4.96	0.0519	1
11031	123478-HxCDD	39227-28-6	0.853	JB	4.96	0.0426	1
11031	123678-HxCDD	57653-85-7	2.03	JB	4.96	0.0423	1
11031	123789-HxCDD	19408-74-3	1.48	JB	4.96	0.0412	1
11031	1234678-HpCDD	35822-46-9	57.8	B	4.96	0.0655	1
11031	OCDD	3268-87-9	709	B	9.92	0.0842	1
11031	2378-TCDF	51207-31-9	0.831	J	0.992	0.105	1
11031	12378-PeCDF	57117-41-6	0.652	JB	4.96	0.0506	1
11031	23478-PeCDF	57117-31-4	1.64	JB	4.96	0.0466	1
11031	123478-HxCDF	70648-26-9	0.692	JB	4.96	0.0537	1
11031	123678-HxCDF	57117-44-9	0.669	JB	4.96	0.0525	1
11031	123789-HxCDF	72918-21-9	0.481	JB	4.96	0.0563	1
11031	234678-HxCDF	60851-34-5	0.825	JB	4.96	0.0509	1
11031	1234678-HpCDF	67562-39-4	6.63	B	4.96	0.0338	1
11031	1234789-HpCDF	55673-89-7	0.630	JB	4.96	0.0389	1
11031	OCDF	39001-02-0	14.8	B	9.92	0.0664	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	2.40				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	61	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	57	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 07:31	Mark A Clark	10
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 16:38	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 12:35	Heather E Williams	5
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344003	12/14/2013 04:51	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13344003	12/10/2013 14:30	Brett M Weidman	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:45	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 13:01	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 13:01	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-631-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7293071
LL Group # 1436802
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/25/2013 14:20

Submitted: 11/26/2013 09:50
Reported: 12/17/2013 11:57

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

63100 SDG#: PH134-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 13:01	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 13:01	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:26	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13330039403A	11/26/2013 22:40	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13338SLI026	Sample number(s): 7293060-7293063,7293068-7293069,7293071									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	107		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	115		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	113		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Morpholine	20	U	20.	20	ug/kg					
Naphthalene	1.7	U	1.7	0.67	ug/kg	100		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	98		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	112		79-112		
Batch number: 13338SLJ026	Sample number(s): 7293061-7293063,7293068-7293069									
Acenaphthene	17	U	17.	3	ug/kg	96		83-111		
Acenaphthylene	17	U	17.	3	ug/kg	109		83-127		
Aniline	330 U		330.	170	ug/kg	77		43-110		
Anthracene	17	U	17.	3	ug/kg	100		82-118		
Benzidine	1,700 U		1,700.	700	ug/kg	62		25-74		
Benzo(a)anthracene	17	U	17.	3	ug/kg	98		81-117		
Benzo(a)pyrene	17	U	17.	3	ug/kg	103		84-122		
Benzo(b)fluoranthene	17	U	17.	3	ug/kg	108		76-124		
Benzo(g,h,i)perylene	17	U	17.	3	ug/kg	101		77-122		
Benzo(k)fluoranthene	17	U	17.	3	ug/kg	114		80-125		
Benzoic acid	500 U		500.	170	ug/kg	78		41-122		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzyl alcohol	330 U		330.	170	ug/kg	98		78-115		
1,1'-Biphenyl	33	U	33.	17	ug/kg	97		76-117		
4-Bromophenyl-phenylether	33	U	33.	17	ug/kg	102		84-120		
2-butoxy-Ethanol	170 U		170.	170	ug/kg					
Butylbenzylphthalate	170 U		170.	67	ug/kg	104		80-118		
Di-n-butylphthalate	170 U		170.	67	ug/kg	103		84-120		
Carbazole	33	U	33.	17	ug/kg	101		84-119		
4-Chloro-3-methylphenol	33	U	33.	17	ug/kg	105		80-124		
4-Chloroaniline	33	U	33.	17	ug/kg	46		10-100		
bis(2-Chloroethoxy)methane	33	U	33.	17	ug/kg	92		71-121		
bis(2-Chloroethyl)ether	33	U	33.	17	ug/kg	92		77-115		
bis(2-Chloroisopropyl)ether	33	U	33.	17	ug/kg	105		68-118		
2-Chloronaphthalene	33	U	33.	7	ug/kg	105		56-144		
2-Chlorophenol	33	U	33.	17	ug/kg	114		80-122		
4-Chlorophenyl-phenylether	33	U	33.	17	ug/kg	97		83-115		
Chrysene	17	U	17.	3	ug/kg	101		77-116		
Dibenz(a,h)anthracene	17	U	17.	3	ug/kg	103		81-123		
Dibenzofuran	33	U	33.	17	ug/kg	100		85-115		
1,2-Dichlorobenzene	33	U	33.	17	ug/kg	99		79-112		
1,3-Dichlorobenzene	33	U	33.	17	ug/kg	103		79-113		
1,4-Dichlorobenzene	33	U	33.	17	ug/kg	94		79-112		
3,3'-Dichlorobenzidine	330 U		330.	100	ug/kg	38		10-119		
2,4-Dichlorophenol	33	U	33.	17	ug/kg	114		81-123		
2,6-Dichlorophenol	33	U	33.	17	ug/kg	105	108	77-113	3	30
Diethylphthalate	170 U		170.	67	ug/kg	100		82-113		
2,4-Dimethylphenol	33	U	33.	17	ug/kg	100		83-120		
3,5-Dimethylphenol	170 U		170.	33	ug/kg	112		70-130		
Dimethylphthalate	170 U		170.	67	ug/kg	97		82-113		
4,6-Dinitro-2-methylphenol	500 U		500.	170	ug/kg	99		56-132		
2,4-Dinitrophenol	660 U		660.	300	ug/kg	80		24-136		
1,2-Diphenylhydrazine	33	U	33.	17	ug/kg	103		77-111		
bis(2-Ethylhexyl)phthalate	170 U		170.	67	ug/kg	103		75-124		
Fluoranthene	17	U	17.	3	ug/kg	98		79-123		
Fluorene	17	U	17.	3	ug/kg	95		86-118		
Hexachlorobenzene	17	U	17.	3	ug/kg	97		80-121		
Hexachlorobutadiene	33	U	33.	17	ug/kg	101		76-115		
Hexachlorocyclopentadiene	500 U		500.	170	ug/kg	113		70-138		
Hexachloroethane	170 U		170.	33	ug/kg	97		76-109		
Indeno(1,2,3-cd)pyrene	17	U	17.	3	ug/kg	106		77-122		
Isophorone	33	U	33.	17	ug/kg	107		77-119		
1-Methylnaphthalene	17	U	17.	3	ug/kg	113		77-115		
2-Methylnaphthalene	17	U	17.	3	ug/kg	104		80-114		
2-Methylphenol	33	U	33.	17	ug/kg	106		82-125		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Methylphenol	33	U	33.	17	ug/kg	103		73-124		
Naphthalene	17	U	17.	3	ug/kg	101		83-112		
NDPA as diphenylamine	170 U		170.	33	ug/kg	105		70-130		
2-Nitroaniline	33	U	33.	17	ug/kg	102		84-126		
3-Nitroaniline	170 U		170.	67	ug/kg	97		69-122		
4-Nitroaniline	170 U		170.	67	ug/kg	72		51-107		
Nitrobenzene	33	U	33.	17	ug/kg	104		73-118		
2-Nitrophenol	33	U	33.	17	ug/kg	105		83-125		
4-Nitrophenol	500 U		500.	170	ug/kg	88		55-133		
N-Nitroso-di-n-propylamine	33	U	33.	17	ug/kg	99		70-113		
N-Nitrosodimethylamine	170 U		170.	67	ug/kg	94		67-116		
N-Nitrosodiphenylamine	33	U	33.	17	ug/kg	107		83-118		
Di-n-octylphthalate	170 U		170.	67	ug/kg	117		75-136		
Pentachlorophenol	170 U		170.	33	ug/kg	92		56-132		
Phenanthrene	17	U	17.	3	ug/kg	102		85-116		
Phenol	33	U	33.	17	ug/kg	96		76-124		
2-phenoxy-Ethanol	170 U		170.	170	ug/kg					
Pyrene	17	U	17.	3	ug/kg	100		81-114		
Pyridine	170 U		170.	67	ug/kg	81		45-113		
1,2,3,4-Tetrahydronaphthalene	170 U		170.	33	ug/kg					
1,2,4-Trichlorobenzene	33	U	33.	17	ug/kg	104		84-119		
2,4,5-Trichlorophenol	33	U	33.	17	ug/kg	97		86-123		
2,4,6-Trichlorophenol	33	U	33.	17	ug/kg	102		81-123		
Batch number: 13331B94A	Sample number(s): 7293070									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	116	111	75-135	5	30
Batch number: 13339A16A	Sample number(s): 7293068									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	99		67-119		
Batch number: 133360002A	Sample number(s): 7293061-7293063,7293068-7293069									
Formaldehyde	2,000 U		2,000.	1,200	ug/kg	94		69-141		
Batch number: 133390019A	Sample number(s): 7293060-7293063,7293068-7293069,7293071									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	93	90	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	110		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133390014A	Sample number(s): 7293060-7293063,7293068-7293069,7293071									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	80		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		60-115		
Batch number: 133430637001	Sample number(s): 7293060-7293063,7293067-7293069,7293071									
Aluminum	40.0	U	40.0	7.21	mg/kg	107		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	103		80-120		
Calcium	5.64	J	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00	U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	107		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	103		80-120		
Magnesium	1.91	J	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U		100.	8.34	mg/kg	104		80-120		
Sodium	100 U		100.	16.7	mg/kg	104		80-120		
Tin	1.58	J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	106		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	103		80-120		
Batch number: 133430637001A	Sample number(s): 7293060-7293063,7293067-7293069,7293071									
Silver	0.200	U	0.200	0.0260	mg/kg	101		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	100		80-120		
Batch number: 133430637001B	Sample number(s): 7293060-7293063,7293067-7293069,7293071									
Selenium	0.400	U	0.400	0.100	mg/kg	107		80-120		
Batch number: 133430638001	Sample number(s): 7293060-7293063,7293067-7293069,7293071									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 13345243201A	Sample number(s): 7293061,7293064-7293069									
2a Chromium VI by EPA 7199	0.40	U	0.40	0.14	mg/kg	93		80-120		
Batch number: 13330039403A	Sample number(s): 7293060-7293061,7293067-7293069,7293071									
15a pH by 9045D						100		95-105		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13340162401A	Sample number(s): 7293060-7293069,7293071								
14a Moisture Content by 160.3					101		80-120		
14a Moisture Content by 160.3					101		80-120		
14a Moisture Content by 160.3					101		80-120		

Analysis Name	Blank Result	Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13344003	Sample number(s): 7293060-7293063,7293068-7293069,7293071								
2378-TCDD	1.00 U	1.00	0.0828	ng/kg	91		67-158		
12378-PeCDD	0.153 J	5.00	0.0615	ng/kg	96		70-142		
123478-HxCDD	0.0900 J	5.00	0.0435	ng/kg	98		70-164		
123678-HxCDD	0.0931 J	5.00	0.0459	ng/kg	99		76-134		
123789-HxCDD	0.0692 J	5.00	0.0415	ng/kg	99		64-162		
1234678-HpCDD	0.132 J	5.00	0.0556	ng/kg	98		70-140		
OCDD	0.431 J	10.0	0.0676	ng/kg	97		78-144		
2378-TCDF	1.00 U	1.00	0.0848	ng/kg	98		75-158		
12378-PeCDF	0.126 J	5.00	0.0430	ng/kg	99		80-134		
23478-PeCDF	0.163 J	5.00	0.0411	ng/kg	100		68-160		
123478-HxCDF	0.101 J	5.00	0.0451	ng/kg	104		72-134		
123678-HxCDF	0.0928 J	5.00	0.0393	ng/kg	106		84-130		
123789-HxCDF	0.0980 J	5.00	0.0514	ng/kg	103		78-130		
234678-HxCDF	0.0920 J	5.00	0.0415	ng/kg	102		70-156		
1234678-HpCDF	0.163 J	5.00	0.0215	ng/kg	103		82-122		
1234789-HpCDF	0.0441 J	5.00	0.0305	ng/kg	104		78-138		
OCDF	0.239 J	10.0	0.110	ng/kg	102		63-170		
TEQ WHO 2005 - EDLx0.0	0.0252			ng/kg					

Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13338SLI026	Sample number(s): 7293060-7293063,7293068-7293069,7293071 UNSPK: 7293061								
Acenaphthene	99	100	48-127	0	30				
Acenaphthylene	98	101	49-121	3	30				
Anthracene	160*	136*	52-126	17	30				
Benzo(a)anthracene	333*	375*	44-143	11	30				
Benzo(a)pyrene	284*	337*	44-140	16	30				
Benzo(b)fluoranthene	342*	441*	26-142	24	30				
Benzo(e)pyrene	229*	254*	70-130	10	30				
Benzo(g,h,i)perylene	130	146*	33-141	11	30				
Benzo(k)fluoranthene	242*	249*	54-142	2	30				
Butylbenzylphthalate	115	120	49-151	4	30				
Di-n-butylphthalate	111	113	52-147	1	30				
Chrysene	318*	366*	29-148	13	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenz(a,h)anthracene	97	103	20-137	5	30				
Diethylphthalate	102	109	43-145	6	30				
Dimethylphthalate	98	101	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	124	110	39-167	10	30				
Fluoranthene	680*	599*	40-148	13	30				
Fluorene	103	103	51-137	0	30				
Indeno(1,2,3-cd)pyrene	147*	160*	17-136	8	30				
1-Methylnaphthalene	96	96	50-131	0	30				
2-Methylnaphthalene	103	98	35-152	5	30				
Naphthalene	96	96	31-148	0	30				
N-Nitrosodimethylamine	88	91	48-113	2	30				
Di-n-octylphthalate	132	135	52-162	1	30				
Phenanthrene	361*	243*	29-142	39*	30				
Pyrene	523*	490*	26-143	7	30				
Batch number: 13338SLJ026	Sample number(s): 7293061-7293063,7293068-7293069 UNSPK: 7293061								
Acenaphthene	91	85	61-128	6	30				
Acenaphthylene	103	98	67-130	4	30				
Aniline	65	59	10-131	9	30				
Anthracene	96	94	41-142	2	30				
Benzidine	0*	17*	35-141	200*	30				
Benzo(a)anthracene	104	94	32-150	9	30				
Benzo(a)pyrene	99	97	36-151	2	30				
Benzo(b)fluoranthene	107	97	29-150	10	30				
Benzo(g,h,i)perylene	103	104	41-147	1	30				
Benzo(k)fluoranthene	104	100	44-145	3	30				
Benzoic acid	64	47	23-170	31*	30				
Benzyl alcohol	97	89	32-145	8	30				
1,1'-Biphenyl	91	89	64-120	1	30				
4-Bromophenyl-phenylether	97	99	66-122	3	30				
Butylbenzylphthalate	96	100	67-126	5	30				
Di-n-butylphthalate	91	92	70-124	1	30				
Carbazole	94	91	63-126	2	30				
4-Chloro-3-methylphenol	91	86	61-131	6	30				
4-Chloroaniline	55	38	11-114	37*	30				
bis(2-Chloroethoxy)methane	85	81	58-122	5	30				
bis(2-Chloroethyl)ether	92	85	66-122	8	30				
bis(2-Chloroisopropyl)ether	98	93	50-115	5	30				
2-Chloronaphthalene	103	99	50-140	4	30				
2-Chlorophenol	113	105	71-130	7	30				
4-Chlorophenyl-phenylether	90	87	65-117	4	30				
Chrysene	99	93	28-146	6	30				
Dibenz(a,h)anthracene	98	102	54-142	4	30				
Dibenzofuran	95	91	65-124	5	30				
1,2-Dichlorobenzene	97	99	72-114	2	30				
1,3-Dichlorobenzene	91	92	67-118	1	30				
1,4-Dichlorobenzene	91	87	68-119	4	30				
3,3'-Dichlorobenzidine	55	48	10-143	14	30				
2,4-Dichlorophenol	101	95	54-135	6	30				
Diethylphthalate	93	87	66-120	7	30				
2,4-Dimethylphenol	92	86	62-132	6	30				
3,5-Dimethylphenol	94	95	70-130	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dimethylphthalate	93	87	69-119	5	30				
4,6-Dinitro-2-methylphenol	78	77	10-148	0	30				
2,4-Dinitrophenol	59	50	20-143	17	30				
1,2-Diphenylhydrazine	98	102	51-145	5	30				
bis(2-Ethylhexyl)phthalate	103	101	60-134	2	30				
Fluoranthene	106	89	30-151	17	30				
Fluorene	93	85	55-128	9	30				
Hexachlorobenzene	92	91	46-132	1	30				
Hexachlorobutadiene	91	84	65-125	7	30				
Hexachlorocyclopentadiene	108	96	10-153	11	30				
Hexachloroethane	86	90	24-138	5	30				
Indeno(1,2,3-cd)pyrene	101	102	44-147	1	30				
Isophorone	92	89	68-119	3	30				
1-Methylnaphthalene	102	96	82-115	5	30				
2-Methylnaphthalene	91	89	39-140	2	30				
2-Methylphenol	102	98	62-133	3	30				
4-Methylphenol	93	89	59-132	4	30				
Naphthalene	91	84	44-142	8	30				
NDPA as diphenylamine	101	102	70-130	2	30				
2-Nitroaniline	94	90	64-131	5	30				
3-Nitroaniline	89	84	31-145	5	30				
4-Nitroaniline	80	76	30-131	5	30				
Nitrobenzene	92	88	63-125	4	30				
2-Nitrophenol	96	91	45-146	6	30				
4-Nitrophenol	88	80	25-142	9	30				
N-Nitroso-di-n-propylamine	93	95	58-126	2	30				
N-Nitrosodimethylamine	80	75	52-117	6	30				
N-Nitrosodiphenylamine	102	104	59-135	2	30				
Di-n-octylphthalate	100	99	48-155	1	30				
Pentachlorophenol	78	81	23-145	4	30				
Phenanthrene	106	96	34-147	10	30				
Phenol	92	86	61-130	6	30				
Pyrene	111	101	29-148	9	30				
Pyridine	43	41	16-108	4	30				
1,2,4-Trichlorobenzene	89	89	66-116	0	30				
2,4,5-Trichlorophenol	96	86	64-131	10	30				
2,4,6-Trichlorophenol	97	95	60-136	2	30				
Batch number: 13339A16A	Sample number(s): 7293068 UNSPK: P300108								
11a TPH by EPA 8015B GRO	85	92	69-123	3	30				
Batch number: 133360002A	Sample number(s): 7293061-7293063,7293068-7293069 UNSPK: 7293061								
Formaldehyde	93	92	66-134	1	50				
Batch number: 133390019A	Sample number(s): 7293060-7293063,7293068-7293069,7293071 UNSPK: 7293061								
PCB-1016	99	99	41-135	0	50				
PCB-1260	109	116	40-134	6	50				
Batch number: 133390014A	Sample number(s): 7293060-7293063,7293068-7293069,7293071 UNSPK: 7293061								
EFH (C12-C14)	103	102	49-123	1	20				
EFH (C15-C20)	122	129*	49-123	5	20				
EFH (C21-C30)	87	121	49-123	17	20				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
EFH (C30-C40)	48*	86	49-123	14	20				
EFH (C8-C11)	85	86	49-123	2	20				
Batch number: 133430637001	Sample number(s): 7293060-7293063,7293067-7293069,7293071 UNSPK: 7293061 BKG: 7293061								
Aluminum	1327 (2)	1501 (2)	75-125	2	20	15,500	14,800	4	20
Antimony	68*	66*	75-125	3	20	4.00 U	4.00 U	0 (1)	20
Arsenic	103	103	75-125	0	20	3.10 J	2.89 J	7 (1)	20
Barium	100	100	75-125	1	20	87.1	85.5	2	20
Beryllium	102	102	75-125	0	20	0.607 J	0.576 J	5 (1)	20
Boron	95	95	75-125	1	20	1.99 J	1.73 J	14 (1)	20
Cadmium	95	94	75-125	1	20	1.00 U	1.00 U	0 (1)	20
Calcium	124 (2)	153 (2)	75-125	4	20	2,580	2,560	1	20
Chromium	92	91	75-125	1	20	32.5	30.9	5	20
Cobalt	95	95	75-125	0	20	4.13	4.15	1 (1)	20
Copper	109	112	75-125	2	20	17.9	18.4	3	20
Iron	-227 (2)	390 (2)	75-125	3	20	19,200	18,400	4	20
Lead	94	95	75-125	1	20	7.35	6.93	6 (1)	20
Lithium	102	102	75-125	0	20	22.9	22.3	3	20
Magnesium	157 (2)	210 (2)	75-125	2	20	3,950	3,790	4	20
Manganese	105 (2)	130 (2)	75-125	4	20	286	290	1	20
Molybdenum	96	96	75-125	0	20	0.430 J	0.380 J	12 (1)	20
Nickel	98	99	75-125	0	20	10.1	10.1	1	20
Phosphorus	90	105	75-125	4	20	294	307	4	20
Potassium	132*	139*	75-125	1	20	3,130	3,110	1	20
Sodium	103	102	75-125	0	20	95.0 J	93.5 J	2 (1)	20
Tin	90	90	75-125	0	20	3.04 J	2.79 J	8 (1)	20
Titanium	285 (2)	359 (2)	75-125	5	20	1,070	1,070	0	20
Vanadium	106	108	75-125	1	20	32.2	31.3	3	20
Zinc	66*	69*	75-125	1	20	113	102	11	20
Zirconium	96	95	75-125	1	20	2.59 J	2.78 J	7 (1)	20
Batch number: 133430637001A	Sample number(s): 7293060-7293063,7293067-7293069,7293071 UNSPK: 7293061 BKG: 7293061								
Silver	109	106	75-125	1	20	13.3	15.0	12	20
Strontium	102	107	75-125	1	20	19.4	19.6	1	20
Thallium	115	111	75-125	3	20	0.224	0.224	0 (1)	20
Batch number: 133430637001B	Sample number(s): 7293060-7293063,7293067-7293069,7293071 UNSPK: 7293061 BKG: 7293061								
Selenium	100	102	75-125	3	20	0.181 J	0.177 J	2 (1)	20
Batch number: 133430638001	Sample number(s): 7293060-7293063,7293067-7293069,7293071 UNSPK: 7293061 BKG: 7293061								
3a Mercury 7471A	120	111	65-135	9	20	0.0390	0.0419	7 (1)	20
Batch number: 13345243201A	Sample number(s): 7293061,7293064-7293069 UNSPK: 7293061 BKG: 7293061								
2a Chromium VI by EPA 7199	87		75-125			1.1	1.8	53* (1)	20
Batch number: 13330039403A	Sample number(s): 7293060-7293061,7293067-7293069,7293071 BKG: 7293060								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
15a pH by 9045D						7.04	7.01	0	3
Batch number: 13340162401A	Sample number(s): 7293060-7293069,7293071 BKG: 7293061								
14a Moisture Content by 160.3						2.0	1.7	20	20
14a Moisture Content by 160.3						2.0	1.7	20	20
14a Moisture Content by 160.3						2.0	1.7	20	20
Batch number: 13344003	Sample number(s): 7293060-7293063,7293068-7293069,7293071 UNSPK: 7293061								
2378-TCDD	87	87	40-135	0	20				
12378-PeCDD	92	93	40-135	2	20				
123478-HxCDD	97	97	40-135	0	20				
123678-HxCDD	95	100	40-135	5	20				
123789-HxCDD	95	98	40-135	3	20				
1234678-HpCDD	-32*	107	40-135	45*	20				
OCDD	-3103 (2)	1390 (2)	40-135	105*	20				
2378-TCDF	92	93	40-135	2	20				
12378-PeCDF	97	100	40-135	3	20				
23478-PeCDF	99	99	40-135	1	20				
123478-HxCDF	101	102	40-135	1	20				
123678-HxCDF	102	101	40-135	0	20				
123789-HxCDF	101	102	40-135	1	20				
234678-HxCDF	101	101	40-135	1	20				
1234678-HpCDF	84	107	40-135	18	20				
1234789-HpCDF	99	100	40-135	2	20				
OCDF	74	100	40-135	20	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13338SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7293060	85	85	92
7293061	84	86	89
7293062	87	87	93
7293063	86	90	93
7293068	63	64	70
7293069	90	93	100
7293071	87	82	96
Blank	96	99	107
LCS	86	88	95
MS	87	87	93
MSD	86	90	93

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Surrogate Quality Control

Limits: 54-129 59-125 61-125

Analysis Name: 8a SVOCs by EPA 8270D
Batch number: 13338SLJ026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7293061	85	85	85	84	83	95
7293062	97	97	91	92	98	102
7293063	91	94	87	86	95	107
7293068	65	67	60	63	66	74
7293069	79	79	82	76	85	91
Blank	77	82	87	81	83	88
LCS	102	101	98	101	98	108
LCSD	97	97	99			
MS	97	97	91	92	98	102
MSD	91	94	87	86	95	107
Limits:	25-120	25-130	35-130	40-130	45-130	45-130

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13331B94A

	Trifluorotoluene-F
7293070	106
Blank	91
LCS	98
LCSD	98
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13339A16A

	Trifluorotoluene-F
7293068	98
Blank	100
LCS	110
MS	87
MSD	77
Limits:	50-142

Analysis Name: 25a Formaldehyde by EPA 8315A
Batch number: 133360002A

	Butyraldehyde
7293061	100
7293062	104
7293063	101
7293068	109
7293069	110
Blank	80
LCS	105
MS	104
MSD	101

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Surrogate Quality Control

Limits: 64-126

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133390019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7293060	112	112
7293061	110	112
7293062	111	117
7293063	112	119
7293068	111	110
7293069	110	190*
7293071	111	96
Blank	115	113
LCS	117	122*
LCSD	117	113
MS	111	117
MSD	112	119
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133390014A

	Chlorobenzene	Orthoterphenyl
7293060	101	107
7293061	94	98
7293062	96	102
7293063	96	101
7293068	89	95
7293069	89	93
7293071	85	89
Blank	88	93
LCS	99	104
MS	96	102
MSD	96	101
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13344003

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7293060	64	58	69	71	72	72
7293061	64	57	64	67	66	63
7293062	65	57	64	66	65	66
7293063	71	66	69	71	72	70
7293068	69	63	66	68	71	78
7293069	65	55	61	63	65	65
7293071	72	63	71	71	75	73
Blank	44	40	52	58	55	48
MS	65	57	64	66	65	66
MSD	71	66	69	71	72	70
OPR	65	57	63	67	66	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1436802
Reported: 12/17/13 at 11:57 AM

Surrogate Quality Control

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7293060	63	52	48	62	76	73
7293061	65	53	48	62	71	70
7293062	62	54	45	62	69	68
7293063	71	60	50	70	76	75
7293068	66	58	49	64	75	74
7293069	62	49	45	59	69	69
7293071	67	64	57	66	77	78
Blank	50	38	27	43	59	58
MS	62	54	45	62	69	68
MSD	71	60	50	70	76	75
OPR	64	47	39	61	70	69
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7293060	75	57	51	57	56
7293061	70	61	60	57	59
7293062	68	60	53	56	59
7293063	74	68	64	63	68
7293068	74	64	54	61	63
7293069	69	58	59	55	59
7293071	77	69	61	63	61
Blank	58	45	33	41	40
MS	68	60	53	56	59
MSD	74	68	64	63	68
OPR	68	55	44	52	59
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1436802 7293060-71

CDM Smith

DateShipped: 11/25/2013
CarrierName: FedEx
AirbillNo:

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131125-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-584-SA5A-SB-0.0-0.5	11/25/13 08:50	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-584-SA5A-SB-0.0-0.5	11/25/13 08:50	SO	None	1 - 4 oz glass	10 day													X																					
SL-715-SA5A-SB-0.0-0.5MS	11/25/13 10:10	SO	None	6 - SS-Sleeve	10 day	X	X				X	X		X	X											X						X							Include Morpholine in TIC
SL-715-SA5A-SB-0.0-0.5MS	11/25/13 10:10	SO	None	6 - 4 oz glass	10 day													X		X																		
SL-715-SA5A-SB-6.0-7.0	11/25/13 11:50	SO	None	2 - 16 oz glass	10 day	X	X				X	X		X	X			X		X						X						X						
SL-715-SA5A-SB-6.0-7.0	11/25/13 11:50	SO	None	2 - Encore	10 day																				X													
SL-1015-SA5A-SB-0.0-0.5	11/25/13 10:02	SO	None	2 - SS-Sleeve	10 day	X	X				X	X		X	X											X						X						
SL-1015-SA5A-SB-0.0-0.5	11/25/13 10:02	SO	None	2 - 4 oz glass	10 day													X		X																		
TB-112513	11/25/13 08:00	AQ	None	3 - 40 mL Vial	10 day																				X													
SL-631-SA5A-SB-0.0-0.5	11/25/13 14:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X												
SL-631-SA5A-SB-0.0-0.5	11/25/13 14:20	SO	None	1 - 4 oz glass	10 day													X																				

Special Instructions:

Sampler: R Harden Burger

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	11/25/13	1600									
									C Eslin	11/26/13	0950

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Environmental Sample Administration Receipt Documentation Log

1436802

Client/Project: CDM Smith

Date of Receipt: 11/26/13

Time of Receipt: 0950

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.4	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 3647 **Date/Time:** 11/26/13 1115

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

January 09, 2014

Project: SSFL Phase 3 Sampling

Submittal Date: 11/27/2013
Group Number: 1437148
SDG: PH135
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-713-SA5A-SB-0.0-0.5 Soil	7295434
SL-713-SA5A-SB-2.5-3.5 Soil	7295435
SL-719-SA5A-SB-0.0-0.5 Soil	7295436
SL-720-SA5A-SB-0.0-0.5 Soil	7295437
SL-724-SA5A-SB-0.0-0.5 Soil	7295438
TB-112613 Water	7295439
SL-738-SA5A-SB-0.0-0.5 Soil	7295440
SL-738-SA5A-SB-3.0-4.0 Soil	7295441
SL-767-SA5A-SB-0.0-0.5 Soil	7295442
SL-767-SA5A-SB-2.5-3.5 Soil	7295443
EB1-112613 Water	7295444
EB2-112613 Water	7295445

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,500		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	5.83		4.00	0.700	1
06946	Barium	7440-39-3	86.1		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.767	J	1.00	0.0670	1
07914	Boron	7440-42-8	3.61	J	10.0	0.840	1
06949	Cadmium	7440-43-9	0.140	J	1.00	0.0760	1
01650	Calcium	7440-70-2	2,010		20.0	3.34	1
06951	Chromium	7440-47-3	21.0		3.00	0.160	1
06952	Cobalt	7440-48-4	5.86		1.00	0.0991	1
06953	Copper	7440-50-8	7.29		2.00	0.290	1
01654	Iron	7439-89-6	21,500		40.0	3.62	1
06955	Lead	7439-92-1	7.17		3.00	0.500	1
01656	Lithium	7439-93-2	23.3		4.0	0.34	1
01657	Magnesium	7439-95-4	4,210		10.0	1.67	1
06958	Manganese	7439-96-5	326		1.00	0.0830	1
06960	Molybdenum	7439-98-7	1.26	J	2.00	0.170	1
06961	Nickel	7440-02-0	9.21		2.00	0.130	1
10145	Phosphorus	7723-14-0	179		10.0	2.89	1
01662	Potassium	7440-09-7	1,960		100	8.34	1
01667	Sodium	7440-23-5	126		100	16.7	1
06969	Tin	7440-31-5	2.72	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,110		1.00	0.170	1
06971	Vanadium	7440-62-2	38.1		1.00	0.130	1
06972	Zinc	7440-66-6	53.9		4.00	0.200	1
10146	Zirconium	7440-67-7	1.38	J	5.00	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.400	U	0.400	0.100	2
06142	Silver	7440-22-4	0.0444	J	0.200	0.0260	2
06144	Strontium	7440-24-6	17.8		0.400	0.0680	2
06145	Thallium	7440-28-0	0.248		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0159	J	0.0163	0.0098	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.44		0.0100	0.0100	1
	The pH was measured in water at 19.6 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0549	1
11031	12378-PeCDD	40321-76-4	0.116	JQ	5.17	0.0385	1
11031	123478-HxCDD	39227-28-6	0.0412	JBQ	5.17	0.0260	1
11031	123678-HxCDD	57653-85-7	0.0690	JB	5.17	0.0279	1
11031	123789-HxCDD	19408-74-3	0.106	JBQ	5.17	0.0259	1
11031	1234678-HpCDD	35822-46-9	0.643	JB	5.17	0.0350	1
11031	OCDD	3268-87-9	8.08	JB	10.3	0.0229	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0431	1
11031	12378-PeCDF	57117-41-6	0.0721	JQ	5.17	0.0216	1
11031	23478-PeCDF	57117-31-4	0.0527	JBQ	5.17	0.0214	1
11031	123478-HxCDF	70648-26-9	0.0466	JB	5.17	0.0236	1
11031	123678-HxCDF	57117-44-9	0.0731	JB	5.17	0.0238	1
11031	123789-HxCDF	72918-21-9	0.0594	JB	5.17	0.0276	1
11031	234678-HxCDF	60851-34-5	0.0564	JBQ	5.17	0.0237	1
11031	1234678-HpCDF	67562-39-4	0.147	JB	5.17	0.0144	1
11031	1234789-HpCDF	55673-89-7	0.0607	JBQ	5.17	0.0193	1
11031	OCDF	39001-02-0	0.361	JBQ	10.3	0.0470	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0351				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	71	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/14/2013 13:39	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 16:57	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 06:29	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/12/2013 23:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:47	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:38	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:38	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:18	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:18	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295434
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:45

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71300 SDG#: PH135-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:27	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.15
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,100		41.7	7.51	1
06944	Antimony	7440-36-0	4.17	U	4.17	0.771	1
06935	Arsenic	7440-38-2	7.08		4.17	0.730	1
06946	Barium	7440-39-3	87.9		1.04	0.0344	1
06947	Beryllium	7440-41-7	0.814	J	1.04	0.0698	1
07914	Boron	7440-42-8	2.91	J	10.4	0.875	1
06949	Cadmium	7440-43-9	0.174	J	1.04	0.0792	1
01650	Calcium	7440-70-2	2,880		20.8	3.48	1
06951	Chromium	7440-47-3	23.4		3.13	0.167	1
06952	Cobalt	7440-48-4	5.17		1.04	0.103	1
06953	Copper	7440-50-8	8.97		2.08	0.302	1
01654	Iron	7439-89-6	25,900		41.7	3.77	1
06955	Lead	7439-92-1	8.20		3.13	0.521	1
01656	Lithium	7439-93-2	27.1		4.2	0.35	1
01657	Magnesium	7439-95-4	5,660		10.4	1.74	1
06958	Manganese	7439-96-5	235		1.04	0.0865	1
06960	Molybdenum	7439-98-7	0.313	J	2.08	0.177	1
06961	Nickel	7440-02-0	7.86		2.08	0.135	1
10145	Phosphorus	7723-14-0	295		10.4	3.01	1
01662	Potassium	7440-09-7	1,590		104	8.69	1
01667	Sodium	7440-23-5	129		104	17.4	1
06969	Tin	7440-31-5	3.33	J	10.4	0.229	1
06970	Titanium	7440-32-6	1,340		1.04	0.177	1
06971	Vanadium	7440-62-2	44.7		1.04	0.135	1
06972	Zinc	7440-66-6	51.6		4.17	0.208	1
10146	Zirconium	7440-67-7	1.24	J	5.21	0.875	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.105	J	0.417	0.104	2
06142	Silver	7440-22-4	0.208	U	0.208	0.0271	2
06144	Strontium	7440-24-6	23.1		0.417	0.0709	2
06145	Thallium	7440-28-0	0.244		0.208	0.0313	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0134	J	0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.48		0.0100	0.0100	1
	The pH was measured in water at 18.9 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.0		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0776 JQ	1.04	0.0576	1
11031	12378-PeCDD	40321-76-4	0.0338 JQ	5.20	0.0277	1
11031	123478-HxCDD	39227-28-6	5.20 U	5.20	0.0231	1
11031	123678-HxCDD	57653-85-7	0.0457 JBQ	5.20	0.0246	1
11031	123789-HxCDD	19408-74-3	0.0416 JBQ	5.20	0.0223	1
11031	1234678-HpCDD	35822-46-9	0.0616 JBQ	5.20	0.0260	1
11031	OCDD	3268-87-9	0.332 JB	10.4	0.0207	1
11031	2378-TCDF	51207-31-9	1.04 U	1.04	0.0442	1
11031	12378-PeCDF	57117-41-6	0.0540 JQ	5.20	0.0186	1
11031	23478-PeCDF	57117-31-4	5.20 U	5.20	0.0185	1
11031	123478-HxCDF	70648-26-9	5.20 U	5.20	0.0214	1
11031	123678-HxCDF	57117-44-9	0.0263 JBQ	5.20	0.0199	1
11031	123789-HxCDF	72918-21-9	0.0434 JBQ	5.20	0.0239	1
11031	234678-HxCDF	60851-34-5	0.0221 JBQ	5.20	0.0207	1
11031	1234678-HpCDF	67562-39-4	0.0214 JBQ	5.20	0.00947	1
11031	1234789-HpCDF	55673-89-7	0.0191 JBQ	5.20	0.0133	1
11031	OCDF	39001-02-0	0.111 JBQ	10.4	0.0364	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000105			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 05:26	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/05/2013 21:47	Laura M Krieger	25.15
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333133289	11/27/2013 15:35	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333133289	11/27/2013 15:35	Lisa J Cooke	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 17:15	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 06:50	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 00:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:51	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-713-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295435
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71325 SDG#: PH135-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:41	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:41	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:20	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:20	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:29	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	0.64	J	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	0.82	J	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	0.85	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.2	J	1.7	0.68	1
12969	Pyrene	129-00-0	0.74	J	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	0.11	J	0.18	0.069	1
10318	o-Terphenyl	84-15-1	0.18	U	0.18	0.069	1
10318	p-Terphenyl	92-94-4	0.18	U	0.18	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	10	U	10	4.1	2
12952	EFH (C21-C30)	n.a.	56		10	4.1	2
12952	EFH (C30-C40)	n.a.	71		20	8.2	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	7,900		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	4.00	J	4.09	0.716	1
06946	Barium	7440-39-3	54.8		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.369	J	1.02	0.0685	1
07914	Boron	7440-42-8	2.00	J	10.2	0.859	1
06949	Cadmium	7440-43-9	0.241	J	1.02	0.0777	1
01650	Calcium	7440-70-2	2,400		20.5	3.42	1
06951	Chromium	7440-47-3	12.2		3.07	0.164	1
06952	Cobalt	7440-48-4	4.09		1.02	0.101	1
06953	Copper	7440-50-8	5.35		2.05	0.297	1
01654	Iron	7439-89-6	15,800		40.9	3.70	1
06955	Lead	7439-92-1	4.83		3.07	0.511	1
01656	Lithium	7439-93-2	14.7		4.1	0.35	1
01657	Magnesium	7439-95-4	3,350		10.2	1.71	1
06958	Manganese	7439-96-5	288		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.473	J	2.05	0.174	1
06961	Nickel	7440-02-0	4.72		2.05	0.133	1
10145	Phosphorus	7723-14-0	302		10.2	2.96	1
01662	Potassium	7440-09-7	2,510		102	8.53	1
01667	Sodium	7440-23-5	129		102	17.1	1
06969	Tin	7440-31-5	2.54	J	10.2	0.225	1
06970	Titanium	7440-32-6	928		1.02	0.174	1
06971	Vanadium	7440-62-2	24.5		1.02	0.133	1
06972	Zinc	7440-66-6	56.7		4.09	0.205	1
10146	Zirconium	7440-67-7	5.11	U	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.409	U	0.409	0.102	2
06142	Silver	7440-22-4	0.163	J	0.205	0.0266	2
06144	Strontium	7440-24-6	11.8		0.409	0.0696	2
06145	Thallium	7440-28-0	0.213		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.288		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	10.3		0.0100	0.0100	1
	The pH was measured in water at 19.6 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.2	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0742	1
11031	12378-PeCDD	40321-76-4	0.0589	JQ	5.08	0.0444	1
11031	123478-HxCDD	39227-28-6	0.108	JBQ	5.08	0.0478	1
11031	123678-HxCDD	57653-85-7	0.301	JB	5.08	0.0510	1
11031	123789-HxCDD	19408-74-3	0.156	JBQ	5.08	0.0464	1
11031	1234678-HpCDD	35822-46-9	8.20	B	5.08	0.0537	1
11031	OCDD	3268-87-9	89.2	B	10.2	0.0335	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0594	1
11031	12378-PeCDF	57117-41-6	0.0634	J	5.08	0.0275	1
11031	23478-PeCDF	57117-31-4	0.0475	JBQ	5.08	0.0270	1
11031	123478-HxCDF	70648-26-9	0.0891	JB	5.08	0.0384	1
11031	123678-HxCDF	57117-44-9	0.0501	JBQ	5.08	0.0348	1
11031	123789-HxCDF	72918-21-9	5.08	U	5.08	0.0420	1
11031	234678-HxCDF	60851-34-5	0.0916	JB	5.08	0.0351	1
11031	1234678-HpCDF	67562-39-4	1.91	JB	5.08	0.0182	1
11031	1234789-HpCDF	55673-89-7	0.101	JB	5.08	0.0267	1
11031	OCDF	39001-02-0	6.80	JB	10.2	0.0541	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.181				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	91	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	69	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 05:59	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 17:34	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133390026A	12/10/2013 17:34	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 11:31	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
10303	Terphenyls soil prep	SW-846 3550B	1	133390026A	12/06/2013 09:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 01:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 10:55	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-719-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295436
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 09:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

71900 SDG#: PH135-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:43	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:43	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:23	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:23	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:31	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	0.18	U	0.18	0.069	1
10318	o-Terphenyl	84-15-1	0.18	U	0.18	0.069	1
10318	p-Terphenyl	92-94-4	0.18	U	0.18	0.069	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,400		40.5	7.29	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	4.04	J	4.05	0.708	1
06946	Barium	7440-39-3	63.9		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.432	J	1.01	0.0678	1
07914	Boron	7440-42-8	2.24	J	10.1	0.850	1
06949	Cadmium	7440-43-9	0.197	J	1.01	0.0769	1
01650	Calcium	7440-70-2	2,590		20.2	3.38	1
06951	Chromium	7440-47-3	18.9		3.04	0.162	1
06952	Cobalt	7440-48-4	5.07		1.01	0.100	1
06953	Copper	7440-50-8	7.05		2.02	0.293	1
01654	Iron	7439-89-6	19,300		40.5	3.66	1
06955	Lead	7439-92-1	4.59		3.04	0.506	1
01656	Lithium	7439-93-2	18.7		4.0	0.34	1
01657	Magnesium	7439-95-4	4,850		10.1	1.69	1
06958	Manganese	7439-96-5	276		1.01	0.0840	1
06960	Molybdenum	7439-98-7	0.326	J	2.02	0.172	1
06961	Nickel	7440-02-0	7.91		2.02	0.132	1
10145	Phosphorus	7723-14-0	370		10.1	2.92	1
01662	Potassium	7440-09-7	2,460		101	8.44	1
01667	Sodium	7440-23-5	71.8	J	101	16.9	1
06969	Tin	7440-31-5	2.58	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,040		1.01	0.172	1
06971	Vanadium	7440-62-2	34.0		1.01	0.132	1
06972	Zinc	7440-66-6	49.7		4.05	0.202	1
10146	Zirconium	7440-67-7	5.06	U	5.06	0.850	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.123	J	0.405	0.101	2
06142	Silver	7440-22-4	0.202	U	0.202	0.0263	2
06144	Strontium	7440-24-6	13.4		0.405	0.0688	2
06145	Thallium	7440-28-0	0.217		0.202	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0164	U	0.0164	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.81		0.0100	0.0100	1
	The pH was measured in water at 19.2 C.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	3.1	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.01	U	1.01	0.0620	1
11031	12378-PeCDD	40321-76-4	5.03	U	5.03	0.0336	1
11031	123478-HxCDD	39227-28-6	0.0289	JBQ	5.03	0.0195	1
11031	123678-HxCDD	57653-85-7	5.03	U	5.03	0.0197	1
11031	123789-HxCDD	19408-74-3	0.0445	JB	5.03	0.0189	1
11031	1234678-HpCDD	35822-46-9	0.220	JB	5.03	0.0258	1
11031	OCDD	3268-87-9	1.86	JB	10.1	0.0179	1
11031	2378-TCDF	51207-31-9	1.01	U	1.01	0.0488	1
11031	12378-PeCDF	57117-41-6	5.03	U	5.03	0.0219	1
11031	23478-PeCDF	57117-31-4	0.0303	JBQ	5.03	0.0216	1
11031	123478-HxCDF	70648-26-9	5.03	U	5.03	0.0213	1
11031	123678-HxCDF	57117-44-9	0.0332	JB	5.03	0.0195	1
11031	123789-HxCDF	72918-21-9	0.0372	JBQ	5.03	0.0211	1
11031	234678-HxCDF	60851-34-5	0.0274	JB	5.03	0.0193	1
11031	1234678-HpCDF	67562-39-4	0.132	JBQ	5.03	0.0110	1
11031	1234789-HpCDF	55673-89-7	0.0358	JBQ	5.03	0.0148	1
11031	OCDF	39001-02-0	0.588	JB	10.1	0.0323	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0134				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	99	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	80	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 07:05	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 17:52	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
10318	27a Terphenyls by 8015B	SW-846 8015B	1	133390026A	12/10/2013 17:12	Glorines Suarez-Rivera	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 07:12	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
10303	Terphenyls soil prep	SW-846 3550B	1	133390026A	12/06/2013 09:15	Katheryne V Sponheimer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 02:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:06	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-720-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295437
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:10

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72000 SDG#: PH135-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:50	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:50	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:30	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:30	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:33	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C15-C20)	n.a.	5.0	U	5.0	2.0	1
12952	EFH (C21-C30)	n.a.	2.0	J	5.0	2.0	1
12952	EFH (C30-C40)	n.a.	5.3	J	10	4.0	1
12952	EFH (C8-C11)	n.a.	5.0	U	5.0	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		40.0	7.21	1
06944	Antimony	7440-36-0	4.00	U	4.00	0.740	1
06935	Arsenic	7440-38-2	4.70		4.00	0.700	1
06946	Barium	7440-39-3	90.8		1.00	0.0330	1
06947	Beryllium	7440-41-7	0.535	J	1.00	0.0670	1
07914	Boron	7440-42-8	2.78	J	10.0	0.840	1
06949	Cadmium	7440-43-9	0.304	J	1.00	0.0760	1
01650	Calcium	7440-70-2	2,110		20.0	3.34	1
06951	Chromium	7440-47-3	18.1		3.00	0.160	1
06952	Cobalt	7440-48-4	5.39		1.00	0.0990	1
06953	Copper	7440-50-8	9.06		2.00	0.290	1
01654	Iron	7439-89-6	21,200		40.0	3.62	1
06955	Lead	7439-92-1	5.59		3.00	0.500	1
01656	Lithium	7439-93-2	24.5		4.0	0.34	1
01657	Magnesium	7439-95-4	4,960		10.0	1.67	1
06958	Manganese	7439-96-5	325		1.00	0.0830	1
06960	Molybdenum	7439-98-7	0.326	J	2.00	0.170	1
06961	Nickel	7440-02-0	8.48		2.00	0.130	1
10145	Phosphorus	7723-14-0	551		10.0	2.89	1
01662	Potassium	7440-09-7	3,540		100	8.34	1
01667	Sodium	7440-23-5	79.3	J	100	16.7	1
06969	Tin	7440-31-5	2.50	J	10.0	0.220	1
06970	Titanium	7440-32-6	1,080		1.00	0.170	1
06971	Vanadium	7440-62-2	34.4		1.00	0.130	1
06972	Zinc	7440-66-6	59.6		4.00	0.200	1
10146	Zirconium	7440-67-7	5.00	U	5.00	0.840	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.136	J	0.400	0.100	2
06142	Silver	7440-22-4	0.200	U	0.200	0.0260	2
06144	Strontium	7440-24-6	13.6		0.400	0.0680	2
06145	Thallium	7440-28-0	0.278		0.200	0.0300	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0110	J	0.0161	0.0097	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.51		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.00 U	1.00	0.0755	1
11031	12378-PeCDD	40321-76-4	0.0729 JQ	5.02	0.0389	1
11031	123478-HxCDD	39227-28-6	0.0283 JBQ	5.02	0.0232	1
11031	123678-HxCDD	57653-85-7	0.0926 JBQ	5.02	0.0248	1
11031	123789-HxCDD	19408-74-3	0.171 JBQ	5.02	0.0223	1
11031	1234678-HpCDD	35822-46-9	0.190 JBQ	5.02	0.0268	1
11031	OCDD	3268-87-9	1.25 JBQ	10.0	0.0200	1
11031	2378-TCDF	51207-31-9	1.00 U	1.00	0.0613	1
11031	12378-PeCDF	57117-41-6	0.0697 JQ	5.02	0.0245	1
11031	23478-PeCDF	57117-31-4	0.0358 JBQ	5.02	0.0226	1
11031	123478-HxCDF	70648-26-9	0.0376 JBQ	5.02	0.0224	1
11031	123678-HxCDF	57117-44-9	0.0280 JBQ	5.02	0.0219	1
11031	123789-HxCDF	72918-21-9	0.0901 JBQ	5.02	0.0228	1
11031	234678-HxCDF	60851-34-5	0.0289 JBQ	5.02	0.0215	1
11031	1234678-HpCDF	67562-39-4	0.0833 JB	5.02	0.0105	1
11031	1234789-HpCDF	55673-89-7	0.0564 JBQ	5.02	0.0138	1
11031	OCDF	39001-02-0	0.208 JBQ	10.0	0.0359	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.000816			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 07:38	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 18:11	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 07:34	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 03:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:10	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:53	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:53	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:32	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:32	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-724-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295438
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 10:40

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

72400 SDG#: PH135-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:39	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295439
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 08:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

135TB SDG#: PH135-06TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13331B94A	12/02/2013 13:18	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13331B94A	12/02/2013 13:18	Marie D Beamenderfer	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	5.0	J	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,400		42.3	7.63	1
06944	Antimony	7440-36-0	4.23	U	4.23	0.783	1
06935	Arsenic	7440-38-2	8.17		4.23	0.741	1
06946	Barium	7440-39-3	126		1.06	0.0349	1
06947	Beryllium	7440-41-7	1.08		1.06	0.0709	1
07914	Boron	7440-42-8	3.97	J	10.6	0.889	1
06949	Cadmium	7440-43-9	0.201	J	1.06	0.0804	1
01650	Calcium	7440-70-2	2,670		21.2	3.53	1
06951	Chromium	7440-47-3	28.0		3.17	0.169	1
06952	Cobalt	7440-48-4	7.77		1.06	0.105	1
06953	Copper	7440-50-8	12.0		2.12	0.307	1
01654	Iron	7439-89-6	27,500		42.3	3.83	1
06955	Lead	7439-92-1	10.1		3.17	0.529	1
01656	Lithium	7439-93-2	27.7		4.2	0.36	1
01657	Magnesium	7439-95-4	5,320		10.6	1.77	1
06958	Manganese	7439-96-5	335		1.06	0.0878	1
06960	Molybdenum	7439-98-7	0.524	J	2.12	0.180	1
06961	Nickel	7440-02-0	13.0		2.12	0.138	1
10145	Phosphorus	7723-14-0	252		10.6	3.06	1
01662	Potassium	7440-09-7	2,180		106	8.83	1
01667	Sodium	7440-23-5	90.9	J	106	17.7	1
06969	Tin	7440-31-5	3.01	J	10.6	0.233	1
06970	Titanium	7440-32-6	1,180		1.06	0.180	1
06971	Vanadium	7440-62-2	50.4		1.06	0.138	1
06972	Zinc	7440-66-6	57.6		4.23	0.212	1
10146	Zirconium	7440-67-7	1.50	J	5.29	0.889	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.294	J	0.423	0.106	2
06142	Silver	7440-22-4	0.0840	J	0.212	0.0275	2
06144	Strontium	7440-24-6	24.4		0.423	0.0720	2
06145	Thallium	7440-28-0	0.314		0.212	0.0317	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0243		0.0166	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.85		0.0100	0.0100	1
	The pH was measured in water at 20.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.06	U	1.06	0.0642	1
11031	12378-PeCDD	40321-76-4	5.29	U	5.29	0.0382	1
11031	123478-HxCDD	39227-28-6	5.29	U	5.29	0.0212	1
11031	123678-HxCDD	57653-85-7	0.0376	JBQ	5.29	0.0229	1
11031	123789-HxCDD	19408-74-3	5.29	U	5.29	0.0207	1
11031	1234678-HpCDD	35822-46-9	0.0524	JBQ	5.29	0.0213	1
11031	OCDD	3268-87-9	0.427	JB	10.6	0.0192	1
11031	2378-TCDF	51207-31-9	1.06	U	1.06	0.0512	1
11031	12378-PeCDF	57117-41-6	5.29	U	5.29	0.0225	1
11031	23478-PeCDF	57117-31-4	0.0331	JBQ	5.29	0.0211	1
11031	123478-HxCDF	70648-26-9	0.0442	JBQ	5.29	0.0201	1
11031	123678-HxCDF	57117-44-9	5.29	U	5.29	0.0193	1
11031	123789-HxCDF	72918-21-9	0.0609	JB	5.29	0.0208	1
11031	234678-HxCDF	60851-34-5	5.29	U	5.29	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.0589	JBQ	5.29	0.00836	1
11031	1234789-HpCDF	55673-89-7	0.0204	JBQ	5.29	0.0115	1
11031	OCDF	39001-02-0	0.0847	JBQ	10.6	0.0311	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00624				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 09:49	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 18:29	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 07:55	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 04:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:13	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:55	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:55	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:35	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:35	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295440
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:15

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73800 SDG#: PH135-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:41	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.72	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.72	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.72	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.72	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.72	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.72	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.4	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.4	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.72	1
12969	Diethylphthalate	84-66-2	19	U	19	6.4	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.4	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.4	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.72	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.72	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.72	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.72	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.72	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.72	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.72	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.4	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.72	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.72	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.88
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.6	1
13099	PCB-1221	11104-28-2	18	U	18	5.5	1
13099	PCB-1232	11141-16-5	18	U	18	4.4	1
13099	PCB-1242	53469-21-9	18	U	18	4.4	1
13099	PCB-1248	12672-29-6	18	U	18	3.6	1
13099	PCB-1254	11097-69-1	18	U	18	4.8	1
13099	PCB-1260	11096-82-5	18	U	18	4.2	1
13099	PCB-1262	37324-23-5	18	U	18	3.6	1
13099	PCB-1268	11100-14-4	18	U	18	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.1	1
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.						
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,800		43.0	7.74	1
06944	Antimony	7440-36-0	4.30	U	4.30	0.795	1
06935	Arsenic	7440-38-2	17.1		4.30	0.752	1
06946	Barium	7440-39-3	142		1.07	0.0354	1
06947	Beryllium	7440-41-7	1.54		1.07	0.0719	1
07914	Boron	7440-42-8	3.41	J	10.7	0.902	1
06949	Cadmium	7440-43-9	0.198	J	1.07	0.0816	1
01650	Calcium	7440-70-2	4,330		21.5	3.59	1
06951	Chromium	7440-47-3	42.5		3.22	0.172	1
06952	Cobalt	7440-48-4	11.3		1.07	0.106	1
06953	Copper	7440-50-8	33.3		2.15	0.311	1
01654	Iron	7439-89-6	45,700		215	19.4	5
06955	Lead	7439-92-1	19.3		3.22	0.537	1
01656	Lithium	7439-93-2	42.0		4.3	0.37	1
01657	Magnesium	7439-95-4	9,320		10.7	1.79	1
06958	Manganese	7439-96-5	350		1.07	0.0891	1
06960	Molybdenum	7439-98-7	0.557	J	2.15	0.183	1
06961	Nickel	7440-02-0	17.5		2.15	0.140	1
10145	Phosphorus	7723-14-0	330		10.7	3.10	1
01662	Potassium	7440-09-7	3,070		107	8.96	1
01667	Sodium	7440-23-5	208		107	17.9	1
06969	Tin	7440-31-5	4.09	J	10.7	0.236	1
06970	Titanium	7440-32-6	1,470		1.07	0.183	1
06971	Vanadium	7440-62-2	71.0		1.07	0.140	1
06972	Zinc	7440-66-6	103		4.30	0.215	1
10146	Zirconium	7440-67-7	1.70	J	5.37	0.902	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.257	J	0.430	0.107	2
06142	Silver	7440-22-4	0.215	U	0.215	0.0279	2
06144	Strontium	7440-24-6	35.2		0.430	0.0730	2
06145	Thallium	7440-28-0	0.416		0.215	0.0322	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0222		0.0180	0.0108	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		Std. Units	Std. Units	Std. Units	
00394	15a pH by 9045D	n.a.	7.11	0.0100	0.0100	1
	The pH was measured in water at 19.8 C.					
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	14a Moisture Content by 160.3	n.a.	7.8	0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.07	U	1.07	0.0768	1
11031	12378-PeCDD	40321-76-4	5.37	U	5.37	0.0464	1
11031	123478-HxCDD	39227-28-6	5.37	U	5.37	0.0286	1
11031	123678-HxCDD	57653-85-7	0.0368	JBQ	5.37	0.0302	1
11031	123789-HxCDD	19408-74-3	0.0571	JBQ	5.37	0.0279	1
11031	1234678-HpCDD	35822-46-9	0.108	JB	5.37	0.0248	1
11031	OCDD	3268-87-9	0.311	JBQ	10.7	0.0195	1
11031	2378-TCDF	51207-31-9	1.07	U	1.07	0.0587	1
11031	12378-PeCDF	57117-41-6	0.0326	JQ	5.37	0.0234	1
11031	23478-PeCDF	57117-31-4	5.37	U	5.37	0.0221	1
11031	123478-HxCDF	70648-26-9	5.37	U	5.37	0.0191	1
11031	123678-HxCDF	57117-44-9	0.0223	JBQ	5.37	0.0187	1
11031	123789-HxCDF	72918-21-9	0.0343	JBQ	5.37	0.0207	1
11031	234678-HxCDF	60851-34-5	5.37	U	5.37	0.0185	1
11031	1234678-HpCDF	67562-39-4	0.0414	JBQ	5.37	0.00987	1
11031	1234789-HpCDF	55673-89-7	0.0184	JB	5.37	0.0127	1
11031	OCDF	39001-02-0	0.0618	JBQ	10.7	0.0345	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00130				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	76	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 10:22	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/05/2013 22:25	Laura M Krieger	25.88
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333133289	11/27/2013 15:36	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333133289	11/27/2013 15:37	Lisa J Cooke	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 18:48	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 08:17	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 05:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 17:47	Katlin N Cataldi	5
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:17	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-738-SA5A-SB-3.0-4.0 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295441
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:20

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

73834 SDG#: PH135-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 19:57	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 19:57	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:37	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:37	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:43	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		ug/kg		ug/kg	ug/kg	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.2		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	14		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		40.8	7.36	1
06944	Antimony	7440-36-0	4.08	U	4.08	0.755	1
06935	Arsenic	7440-38-2	4.87		4.08	0.715	1
06946	Barium	7440-39-3	107		1.02	0.0337	1
06947	Beryllium	7440-41-7	0.590	J	1.02	0.0684	1
07914	Boron	7440-42-8	4.81	J	10.2	0.857	1
06949	Cadmium	7440-43-9	0.373	J	1.02	0.0776	1
01650	Calcium	7440-70-2	2,250		20.4	3.41	1
06951	Chromium	7440-47-3	21.6		3.06	0.163	1
06952	Cobalt	7440-48-4	5.88		1.02	0.101	1
06953	Copper	7440-50-8	11.7		2.04	0.296	1
01654	Iron	7439-89-6	21,200		40.8	3.70	1
06955	Lead	7439-92-1	6.78		3.06	0.510	1
01656	Lithium	7439-93-2	21.6		4.1	0.35	1
01657	Magnesium	7439-95-4	4,400		10.2	1.70	1
06958	Manganese	7439-96-5	337		1.02	0.0847	1
06960	Molybdenum	7439-98-7	0.513	J	2.04	0.174	1
06961	Nickel	7440-02-0	11.0		2.04	0.133	1
10145	Phosphorus	7723-14-0	410		10.2	2.95	1
01662	Potassium	7440-09-7	3,560		102	8.51	1
01667	Sodium	7440-23-5	78.9	J	102	17.0	1
06969	Tin	7440-31-5	2.85	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,110		1.02	0.174	1
06971	Vanadium	7440-62-2	37.6		1.02	0.133	1
06972	Zinc	7440-66-6	58.6		4.08	0.204	1
10146	Zirconium	7440-67-7	1.74	J	5.10	0.857	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.129	J	0.408	0.102	2
06142	Silver	7440-22-4	0.110	J	0.204	0.0265	2
06144	Strontium	7440-24-6	19.1		0.408	0.0694	2
06145	Thallium	7440-28-0	0.263		0.204	0.0306	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0104	J	0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.15		0.0100	0.0100	1
	The pH was measured in water at 19.5 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.0		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.111	JQ	0.995	0.0618	1
11031	12378-PeCDD	40321-76-4	0.0955	JQ	4.98	0.0325	1
11031	123478-HxCDD	39227-28-6	0.0400	JBQ	4.98	0.0282	1
11031	123678-HxCDD	57653-85-7	0.238	JBQ	4.98	0.0312	1
11031	123789-HxCDD	19408-74-3	0.245	JBQ	4.98	0.0280	1
11031	1234678-HpCDD	35822-46-9	4.68	JB	4.98	0.0327	1
11031	OCDD	3268-87-9	138	B	9.95	0.0305	1
11031	2378-TCDF	51207-31-9	0.0553	JQ	0.995	0.0495	1
11031	12378-PeCDF	57117-41-6	0.196	J	4.98	0.0221	1
11031	23478-PeCDF	57117-31-4	0.120	JBQ	4.98	0.0215	1
11031	123478-HxCDF	70648-26-9	0.130	JBQ	4.98	0.0241	1
11031	123678-HxCDF	57117-44-9	0.0687	JBQ	4.98	0.0225	1
11031	123789-HxCDF	72918-21-9	0.214	JB	4.98	0.0270	1
11031	234678-HxCDF	60851-34-5	0.0452	JBQ	4.98	0.0233	1
11031	1234678-HpCDF	67562-39-4	0.448	JB	4.98	0.0155	1
11031	1234789-HpCDF	55673-89-7	0.0486	JBQ	4.98	0.0207	1
11031	OCDF	39001-02-0	1.39	JB	9.95	0.0325	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.120				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	78	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 10:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 19:06	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 09:00	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 06:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:21	Joanne M Gates	1
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 20:00	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 20:00	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:39	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:39	Deborah A Krady	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295442
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 13:55

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76700 SDG#: PH135-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:45	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.69	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.69	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.69	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.69	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.69	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.69	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.2	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.2	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.69	1
12969	Diethylphthalate	84-66-2	19	U	19	6.2	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.2	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.2	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.69	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.69	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.69	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.69	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.69	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.69	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.69	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.2	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.69	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.69	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	26.48
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C21-C30)	n.a.	4.1	J	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	13		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		40.9	7.37	1
06944	Antimony	7440-36-0	4.09	U	4.09	0.757	1
06935	Arsenic	7440-38-2	4.76		4.09	0.716	1
06946	Barium	7440-39-3	105		1.02	0.0338	1
06947	Beryllium	7440-41-7	0.586	J	1.02	0.0685	1
07914	Boron	7440-42-8	4.26	J	10.2	0.859	1
06949	Cadmium	7440-43-9	0.328	J	1.02	0.0777	1
01650	Calcium	7440-70-2	2,340		20.5	3.42	1
06951	Chromium	7440-47-3	20.4		3.07	0.164	1
06952	Cobalt	7440-48-4	5.83		1.02	0.101	1
06953	Copper	7440-50-8	11.8		2.05	0.297	1
01654	Iron	7439-89-6	21,200		40.9	3.70	1
06955	Lead	7439-92-1	7.03		3.07	0.511	1
01656	Lithium	7439-93-2	21.7		4.1	0.35	1
01657	Magnesium	7439-95-4	4,430		10.2	1.71	1
06958	Manganese	7439-96-5	336		1.02	0.0849	1
06960	Molybdenum	7439-98-7	0.498	J	2.05	0.174	1
06961	Nickel	7440-02-0	10.6		2.05	0.133	1
10145	Phosphorus	7723-14-0	418		10.2	2.96	1
01662	Potassium	7440-09-7	3,590		102	8.53	1
01667	Sodium	7440-23-5	77.4	J	102	17.1	1
06969	Tin	7440-31-5	2.97	J	10.2	0.225	1
06970	Titanium	7440-32-6	1,130		1.02	0.174	1
06971	Vanadium	7440-62-2	37.5		1.02	0.133	1
06972	Zinc	7440-66-6	61.1		4.09	0.205	1
10146	Zirconium	7440-67-7	1.66	J	5.11	0.859	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.109	J	0.409	0.102	2
06142	Silver	7440-22-4	0.0456	J	0.205	0.0266	2
06144	Strontium	7440-24-6	19.5		0.409	0.0696	2
06145	Thallium	7440-28-0	0.241		0.205	0.0307	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0111	J	0.0166	0.0099	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.78		0.0100	0.0100	1
	The pH was measured in water at 19.3 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.992	U	0.992	0.0507	1
11031	12378-PeCDD	40321-76-4	0.262	JQ	4.96	0.0325	1
11031	123478-HxCDD	39227-28-6	0.110	JBQ	4.96	0.0285	1
11031	123678-HxCDD	57653-85-7	0.232	JBQ	4.96	0.0304	1
11031	123789-HxCDD	19408-74-3	0.266	JBQ	4.96	0.0274	1
11031	1234678-HpCDD	35822-46-9	3.05	JB	4.96	0.0301	1
11031	OCDD	3268-87-9	49.8	B	9.92	0.0239	1
11031	2378-TCDF	51207-31-9	0.0890	JQ	0.992	0.0426	1
11031	12378-PeCDF	57117-41-6	0.275	J	4.96	0.0199	1
11031	23478-PeCDF	57117-31-4	0.171	JBQ	4.96	0.0192	1
11031	123478-HxCDF	70648-26-9	0.123	JBQ	4.96	0.0243	1
11031	123678-HxCDF	57117-44-9	0.156	JB	4.96	0.0233	1
11031	123789-HxCDF	72918-21-9	0.265	JBQ	4.96	0.0235	1
11031	234678-HxCDF	60851-34-5	0.125	JBQ	4.96	0.0220	1
11031	1234678-HpCDF	67562-39-4	0.526	JB	4.96	0.0125	1
11031	1234789-HpCDF	55673-89-7	0.0869	JB	4.96	0.0159	1
11031	OCDF	39001-02-0	1.12	JB	9.92	0.0249	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0757				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	57	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 11:30	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/05/2013 23:03	Laura M Krieger	26.48
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333133289	11/27/2013 15:38	Lisa J Cooke	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333133289	11/27/2013 15:38	Lisa J Cooke	n.a.
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 19:25	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 09:22	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 11:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06944	Antimony	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06935	Arsenic	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06946	Barium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06947	Beryllium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
07914	Boron	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06949	Cadmium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01650	Calcium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06951	Chromium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06952	Cobalt	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06953	Copper	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01654	Iron	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06955	Lead	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01656	Lithium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01657	Magnesium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06958	Manganese	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06960	Molybdenum	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06961	Nickel	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
10145	Phosphorus	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01662	Potassium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
01667	Sodium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06969	Tin	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06970	Titanium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06971	Vanadium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
06972	Zinc	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1
10146	Zirconium	SW-846 6010C	1	133360637002	12/03/2013 11:25	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-767-SA5A-SB-2.5-3.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7295443
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:05

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

76725 SDG#: PH135-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020A	1	133360637002B	12/03/2013 20:02	John P Hook	2
06142	Silver	SW-846 6020A	1	133360637002A	12/03/2013 20:02	John P Hook	2
06144	Strontium	SW-846 6020A	1	133360637002A	12/03/2013 14:42	Deborah A Krady	2
06145	Thallium	SW-846 6020A	1	133360637002A	12/03/2013 14:42	Deborah A Krady	2
00159	3a Mercury 7471A	SW-846 7471B	1	133360638002	12/03/2013 13:47	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133360637002	12/02/2013 23:06	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133360638002	12/03/2013 02:50	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13331039402A	11/27/2013 21:10	Luz M Groff	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13340162401A	12/06/2013 20:52	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/l**		**ug/l**	**ug/l**	
12971	Acenaphthene	83-32-9	0.050	U	0.050	0.010	1
12971	Acenaphthylene	208-96-8	0.050	U	0.050	0.010	1
12971	Anthracene	120-12-7	0.050	U	0.050	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.050	U	0.050	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.050	U	0.050	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.050	U	0.050	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.050	U	0.050	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.050	U	0.050	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.050	U	0.050	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.050	1
12971	Di-n-butylphthalate	84-74-2	0.24	J	1.0	0.050	1
12971	Chrysene	218-01-9	0.050	U	0.050	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.050	U	0.050	0.010	1
12971	Diethylphthalate	84-66-2	0.44	J	1.0	0.050	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.050	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.29	J	1.0	0.050	1
12971	Fluoranthene	206-44-0	0.050	U	0.050	0.010	1
12971	Fluorene	86-73-7	0.050	U	0.050	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.050	U	0.050	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.010	J	0.050	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.012	J	0.050	0.010	1
12971	Naphthalene	91-20-3	0.031	J	0.050	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.050	U	0.050	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.050	1
12971	Phenanthrene	85-01-8	0.050	U	0.050	0.030	1
12971	Pyrene	129-00-0	0.050	U	0.050	0.010	1
	Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.						
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.41	U	0.41	0.082	1
13092	Aroclor 5442	12642-23-8	0.41	U	0.41	0.082	1
13092	Aroclor 5460	11126-42-4	0.41	U	0.41	0.090	1
13092	PCB-1016	12674-11-2	0.41	U	0.41	0.082	1
13092	PCB-1221	11104-28-2	0.41	U	0.41	0.082	1
13092	PCB-1232	11141-16-5	0.41	U	0.41	0.16	1
13092	PCB-1242	53469-21-9	0.41	U	0.41	0.082	1
13092	PCB-1248	12672-29-6	0.41	U	0.41	0.082	1
13092	PCB-1254	11097-69-1	0.41	U	0.41	0.082	1
13092	PCB-1260	11096-82-5	0.41	U	0.41	0.12	1
13092	PCB-1262	37324-23-5	0.41	U	0.41	0.16	1
13092	PCB-1268	11100-14-4	0.41	U	0.41	0.13	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**		**mg/l**	**mg/l**	

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	**mg/l**	
10319	m-Terphenyl	92-06-8	0.0052 U	0.0052	0.0021	1
10319	o-Terphenyl	84-15-1	0.0052 U	0.0052	0.0021	1
10319	p-Terphenyl	92-94-4	0.0052 U	0.0052	0.0021	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.11 U	0.11	0.054	1
10365	EFH (C15-C20)	n.a.	0.11 U	0.11	0.054	1
10365	EFH (C21-C30)	n.a.	0.11 U	0.11	0.054	1
10365	EFH (C30 - C40)	n.a.	0.54 U	0.54	0.11	1
10365	EFH (C8-C11)	n.a.	0.11 U	0.11	0.054	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200 U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00 U	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0032 J	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 7470A**		mg/l	mg/l	mg/l	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		Std. Units	Std. Units	Std. Units	
12152	28b pH (9040B and 9040C) The holding time was not met.	n.a.	7.0	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.702	JQ	2.23	0.502	1
10915	12378-PeCDD	40321-76-4	0.438	JQ	11.1	0.358	1
10915	123478-HxCDD	39227-28-6	11.1	U	11.1	0.255	1
10915	123678-HxCDD	57653-85-7	11.1	U	11.1	0.263	1
10915	123789-HxCDD	19408-74-3	11.1	U	11.1	0.254	1
10915	1234678-HpCDD	35822-46-9	11.1	U	11.1	0.391	1
10915	OCDD	3268-87-9	1.12	JB	22.3	0.396	1
10915	2378-TCDF	51207-31-9	2.23	U	2.23	0.306	1
10915	12378-PeCDF	57117-41-6	0.571	JBQ	11.1	0.237	1
10915	23478-PeCDF	57117-31-4	0.431	JBQ	11.1	0.209	1
10915	123478-HxCDF	70648-26-9	0.372	JBQ	11.1	0.190	1
10915	123678-HxCDF	57117-44-9	0.311	JBQ	11.1	0.195	1
10915	123789-HxCDF	72918-21-9	0.426	JBQ	11.1	0.218	1
10915	234678-HxCDF	60851-34-5	0.477	JBQ	11.1	0.181	1
10915	1234678-HpCDF	67562-39-4	0.372	JB	11.1	0.108	1
10915	1234789-HpCDF	55673-89-7	0.360	JBQ	11.1	0.144	1
10915	OCDF	39001-02-0	1.42	JBQ	22.3	0.526	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.00400				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	95	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	64	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13336WAC026	12/03/2013 02:24	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13336WAC026	12/02/2013 16:45	Seth A Farrier	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13331B94A	12/02/2013 13:43	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13331B94A	12/02/2013 13:43	Marie D Beamenderfer	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133370008A	12/04/2013 12:36	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133370008A	12/03/2013 17:30	Seth A Farrier	1
10319	23b Terphenyls by 8015B	SW-846 8015B	1	133320013A	12/09/2013 19:56	Glorines Suarez-Rivera	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133360021A	12/06/2013 00:10	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133360021A	12/03/2013 11:30	Kelli M Barto	1
10304	Terphenyls water prep	SW-846 3510C	1	133320013A	12/01/2013 16:00	Elaine F Stoltzfus	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338001	12/05/2013 22:48	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13338001	12/04/2013 10:50	Robert Brown	1
01743	Aluminum	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: EB1-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295444
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 14:30

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB126 SDG#: PH135-11EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07070	Titanium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	133430635002	12/11/2013 03:30	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	133430639002B	12/11/2013 15:26	Parker D Lindstrom	1
06042	Silver	SW-846 6020A	1	133430639002A	12/11/2013 13:30	Parker D Lindstrom	1
06044	Strontium	SW-846 6020A	1	133430639002A	12/11/2013 13:30	Parker D Lindstrom	1
06045	Thallium	SW-846 6020A	1	133430639002A	12/11/2013 13:30	Parker D Lindstrom	1
00259	3b Mercury 7470A	SW-846 7470A	1	133395713005	12/07/2013 10:33	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133430635002	12/10/2013 12:48	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133430639002	12/10/2013 11:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133395713005	12/06/2013 10:35	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13338003104A	12/04/2013 21:44	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.055	U	0.055	0.011	1
12971	Acenaphthylene	208-96-8	0.055	U	0.055	0.011	1
12971	Anthracene	120-12-7	0.055	U	0.055	0.011	1
12971	Benzo(a)anthracene	56-55-3	0.055	U	0.055	0.011	1
12971	Benzo(a)pyrene	50-32-8	0.055	U	0.055	0.011	1
12971	Benzo(b)fluoranthene	205-99-2	0.055	U	0.055	0.011	1
12971	Benzo(e)pyrene	192-97-2	0.055	U	0.055	0.011	1
12971	Benzo(g,h,i)perylene	191-24-2	0.055	U	0.055	0.011	1
12971	Benzo(k)fluoranthene	207-08-9	0.055	U	0.055	0.011	1
12971	Butylbenzylphthalate	85-68-7	1.1	U	1.1	0.055	1
12971	Di-n-butylphthalate	84-74-2	0.20	J	1.1	0.055	1
12971	Chrysene	218-01-9	0.055	U	0.055	0.011	1
12971	Dibenz(a,h)anthracene	53-70-3	0.055	U	0.055	0.011	1
12971	Diethylphthalate	84-66-2	0.35	J	1.1	0.055	1
12971	Dimethylphthalate	131-11-3	1.1	U	1.1	0.055	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.079	J	1.1	0.055	1
12971	Fluoranthene	206-44-0	0.055	U	0.055	0.011	1
12971	Fluorene	86-73-7	0.055	U	0.055	0.011	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.055	U	0.055	0.011	1
12971	1-Methylnaphthalene	90-12-0	0.055	U	0.055	0.011	1
12971	2-Methylnaphthalene	91-57-6	0.011	J	0.055	0.011	1
12971	Morpholine	110-91-8	20	U	20	20	1
12971	Naphthalene	91-20-3	0.055	U	0.055	0.033	1
12971	N-Nitrosodimethylamine	62-75-9	0.055	U	0.055	0.011	1
12971	Di-n-octylphthalate	117-84-0	1.1	U	1.1	0.055	1
12971	Phenanthrene	85-01-8	0.055	U	0.055	0.033	1
12971	Pyrene	129-00-0	0.055	U	0.055	0.011	1
Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.							
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Aldehydes & Ketones	**SW-846 8315A**		ug/l		ug/l	ug/l	
13022	Formaldehyde	50-00-0	50	U	50	30	1
Pesticides/PCBs	**SW-846 8082A**		ug/l		ug/l	ug/l	
13092	Aroclor 5432	63496-31-1	0.44	U	0.44	0.088	1
13092	Aroclor 5442	12642-23-8	0.44	U	0.44	0.088	1
13092	Aroclor 5460	11126-42-4	0.44	U	0.44	0.096	1
13092	PCB-1016	12674-11-2	0.44	U	0.44	0.088	1
13092	PCB-1221	11104-28-2	0.44	U	0.44	0.088	1
13092	PCB-1232	11141-16-5	0.44	U	0.44	0.18	1
13092	PCB-1242	53469-21-9	0.44	U	0.44	0.088	1
13092	PCB-1248	12672-29-6	0.44	U	0.44	0.088	1
13092	PCB-1254	11097-69-1	0.44	U	0.44	0.088	1
13092	PCB-1260	11096-82-5	0.44	U	0.44	0.13	1
13092	PCB-1262	37324-23-5	0.44	U	0.44	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/l**	**ug/l**	**ug/l**	
13092	PCB-1268	11100-14-4	0.44 U	0.44	0.14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.11 U	0.11	0.053	1
10365	EFH (C15-C20)	n.a.	0.11 U	0.11	0.053	1
10365	EFH (C21-C30)	n.a.	0.11 U	0.11	0.053	1
10365	EFH (C30 - C40)	n.a.	0.53 U	0.53	0.11	1
10365	EFH (C8-C11)	n.a.	0.11 U	0.11	0.053	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.					
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400 U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400 U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400 U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100 U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100 U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100 U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100 U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400 U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300 U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100 U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200 U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400 U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300 U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400 U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200 U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100 U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200 U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0018 J	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200 U	0.200	0.0418	1
01762	Potassium	7440-09-7	0.109 J	1.00	0.0980	1
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0022 J	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	2b Chromium VI by EPA 7199	18540-29-9	10.0 U	10.0	5.0	1
	SW-846 9040C		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C) The holding time was not met.	n.a.	6.5	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.739	JQ	2.12	0.524	1
10915	12378-PeCDD	40321-76-4	0.622	J	10.6	0.519	1
10915	123478-HxCDD	39227-28-6	10.6	U	10.6	0.349	1
10915	123678-HxCDD	57653-85-7	10.6	U	10.6	0.373	1
10915	123789-HxCDD	19408-74-3	10.6	U	10.6	0.365	1
10915	1234678-HpCDD	35822-46-9	10.6	U	10.6	0.528	1
10915	OCDD	3268-87-9	1.89	JB	21.2	0.505	1
10915	2378-TCDF	51207-31-9	2.12	U	2.12	0.397	1
10915	12378-PeCDF	57117-41-6	0.506	JB	10.6	0.274	1
10915	23478-PeCDF	57117-31-4	0.428	JBQ	10.6	0.248	1
10915	123478-HxCDF	70648-26-9	0.434	JBQ	10.6	0.223	1
10915	123678-HxCDF	57117-44-9	10.6	U	10.6	0.230	1
10915	123789-HxCDF	72918-21-9	0.315	JBQ	10.6	0.277	1
10915	234678-HxCDF	60851-34-5	0.285	JBQ	10.6	0.236	1
10915	1234678-HpCDF	67562-39-4	0.629	JBQ	10.6	0.155	1
10915	1234789-HpCDF	55673-89-7	0.549	JBQ	10.6	0.213	1
10915	OCDF	39001-02-0	1.41	JBQ	21.2	0.674	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.638				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	100	26 - 152
13C12-123678-HxCDF	101	26 - 123
13C12-234678-HxCDF	97	28 - 136
13C12-123789-HxCDF	93	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	68	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13332WAC026	01/02/2014 05:01	Brian K Graham	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13332WAC026	11/30/2013 12:00	William H Saadeh	1
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13331B94A	12/02/2013 14:08	Marie D Beamenderfer	1
01146	GC VOA Water Prep	SW-846 5030B	1	13331B94A	12/02/2013 14:08	Marie D Beamenderfer	1
13022	19b Formaldehyde 8315A	SW-846 8315A	1	133310016A	11/30/2013 15:28	Jessica L Miller	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133370008A	12/04/2013 12:54	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133370008A	12/03/2013 17:30	Seth A Farrier	1
01013	Formaldehyde Extraction	SW-846 8315A	1	133310016A	11/28/2013 12:00	David V Hershey Jr	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133360021A	12/06/2013 00:32	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133360021A	12/03/2013 11:30	Kelli M Barto	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13338001	12/05/2013 23:44	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13338001	12/04/2013 10:50	Robert Brown	1
01743	Aluminum	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1

*=This limit was used in the evaluation of the final result

Sample Description: EB2-112613 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7295445
LL Group # 1437148
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 11/26/2013 15:00

Submitted: 11/27/2013 10:15
Reported: 01/09/2014 13:33

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB226 SDG#: PH135-12EB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	133430635002	12/11/2013 03:33	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	133430639002B	12/11/2013 15:29	Parker D Lindstrom	1
06042	Silver	SW-846 6020A	1	133430639002A	12/11/2013 13:32	Parker D Lindstrom	1
06044	Strontium	SW-846 6020A	1	133430639002A	12/11/2013 13:32	Parker D Lindstrom	1
06045	Thallium	SW-846 6020A	1	133430639002A	12/11/2013 13:32	Parker D Lindstrom	1
00259	3b Mercury 7470A	SW-846 7470A	1	133395713005	12/07/2013 10:35	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133430635002	12/10/2013 12:48	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133430639002	12/10/2013 11:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133395713005	12/06/2013 10:35	Damary Valentin	1
06467	2b Chromium VI by EPA 7199	SW-846 7199	1	13331987301A	11/27/2013 12:26	Clinton M Wilson	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13338003104A	12/04/2013 21:48	Michele L Graham	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13332WAC026	Sample number(s): 7295445									
Acenaphthene	0.050	U	0.050	0.010	ug/l	103	107	77-118	4	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	111	115	80-123	3	30
Anthracene	0.050	U	0.050	0.010	ug/l	108	113	78-123	4	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	109	113	73-127	4	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	101	106	72-120	4	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	106	111	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	95	100	70-130	5	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	97	103	64-130	5	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	106	110	73-131	4	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	105	91	40-138	15	30
Di-n-butylphthalate	0.053	J	1.0	0.050	ug/l	126	121	64-141	4	30
Chrysene	0.050	U	0.050	0.010	ug/l	103	107	76-125	3	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	98	107	58-131	8	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	113	105	64-128	7	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	97	80	23-139	19	30
Bis(2-Ethylhexyl)phthalate	0.093	J	1.0	0.050	ug/l	108	124	70-143	13	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	104	108	79-124	4	30
Fluorene	0.050	U	0.050	0.010	ug/l	103	108	74-115	4	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	102	103	62-130	1	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	105	109	80-126	4	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	106	110	81-124	4	30
Morpholine	20	U	20.	20	ug/l					
Naphthalene	0.050	U	0.050	0.030	ug/l	104	107	75-120	2	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	76	81	36-120	7	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	111	132	57-145	17	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	101	103	75-120	2	30
Pyrene	0.050	U	0.050	0.010	ug/l	107	112	71-130	4	30
Batch number: 13336WAC026	Sample number(s): 7295444									
Acenaphthene	0.050	U	0.050	0.010	ug/l	97	102	77-118	6	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	104	110	80-123	6	30
Anthracene	0.050	U	0.050	0.010	ug/l	100	107	78-123	7	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	101	110	73-127	9	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	94	101	72-120	7	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	99	104	79-136	5	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	90	96	70-130	7	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	96	102	64-130	6	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	98	105	73-131	6	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	102	112	40-138	10	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	113	120	64-141	6	30
Chrysene	0.050	U	0.050	0.010	ug/l	96	102	76-125	6	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	96	101	58-131	5	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	107	115	64-128	7	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	100	107	23-139	7	30
Bis(2-Ethylhexyl)phthalate	0.13	J	1.0	0.050	ug/l	148*	146*	70-143	1	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	95	102	79-124	7	30
Fluorene	0.050	U	0.050	0.010	ug/l	96	102	74-115	6	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	94	101	62-130	6	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	99	105	80-126	7	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	100	108	81-124	8	30
Naphthalene	0.050	U	0.050	0.030	ug/l	98	105	75-120	7	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	73	77	36-120	5	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	105	96	57-145	9	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	94	101	75-120	7	30
Pyrene	0.050	U	0.050	0.010	ug/l	100	111	71-130	10	30
Batch number: 13338SLI026	Sample number(s): 7295434-7295438,7295440-7295443									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	107		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	115		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	113		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	100		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	98		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	112		79-112		
Batch number: 13331B94A	Sample number(s): 7295439,7295444-7295445									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	116	111	75-135	5	30
Batch number: 13339A16A	Sample number(s): 7295435,7295441,7295443									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	99		67-119		
Batch number: 133310016A	Sample number(s): 7295445									
Formaldehyde	50	U	50.	30	ug/l	93	91	69-130	2	30
Batch number: 133370008A	Sample number(s): 7295444-7295445									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	72	70	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	95	101	67-117	7	30
PCB-1221	0.40	U	0.40	0.080	ug/l					

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	100	109	67-128	8	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					
Batch number: 133390019A	Sample number(s): 7295434-7295438,7295440-7295443									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	93	90	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	110		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133320013A	Sample number(s): 7295444									
m-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	101	100	61-108	1	20
o-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	100	98	75-125	2	20
p-Terphenyl	0.0050	U	0.0050	0.0020	mg/l	99	97	63-110	2	20
Batch number: 133360021A	Sample number(s): 7295444-7295445									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	110	101	70-130	9	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	116	108	70-130	7	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	112	105	70-130	7	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	82	81	70-130	2	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	91	80	70-130	13	30
Batch number: 133390014A	Sample number(s): 7295434-7295438,7295440-7295443									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	80		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		60-115		
Batch number: 133390026A	Sample number(s): 7295436-7295437									
m-Terphenyl	0.17	U	0.17	0.067	mg/kg	100		64-111		
o-Terphenyl	0.17	U	0.17	0.067	mg/kg	99		75-125		
p-Terphenyl	0.17	U	0.17	0.067	mg/kg	98		69-109		
Batch number: 133360637002	Sample number(s): 7295434-7295438,7295440-7295443									
Aluminum	40.0	U	40.0	7.21	mg/kg	104		80-120		
Antimony	4.00	U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00	U	4.00	0.700	mg/kg	106		80-120		
Barium	1.00	U	1.00	0.0330	mg/kg	103		80-120		
Beryllium	1.00	U	1.00	0.0670	mg/kg	98		80-120		
Boron	10.0	U	10.0	0.840	mg/kg	100		80-120		
Cadmium	1.00	U	1.00	0.0760	mg/kg	105		80-120		
Calcium	20.0	U	20.0	3.34	mg/kg	102		80-120		
Chromium	3.00	U	3.00	0.160	mg/kg	105		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cobalt	1.00	U	1.00	0.0990	mg/kg	108		80-120		
Copper	2.00	U	2.00	0.290	mg/kg	104		80-120		
Iron	40.0	U	40.0	3.62	mg/kg	106		80-120		
Lead	3.00	U	3.00	0.500	mg/kg	111		80-120		
Lithium	4.0	U	4.0	0.34	mg/kg	104		80-120		
Magnesium	10.0	U	10.0	1.67	mg/kg	102		80-120		
Manganese	1.00	U	1.00	0.0830	mg/kg	105		80-120		
Molybdenum	2.00	U	2.00	0.170	mg/kg	108		80-120		
Nickel	2.00	U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0	U	10.0	2.89	mg/kg	106		80-120		
Potassium	100 U		100.	8.34	mg/kg	100		80-120		
Sodium	100 U		100.	16.7	mg/kg	101		80-120		
Tin	1.57	J	10.0	0.220	mg/kg	103		80-120		
Titanium	1.00	U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00	U	1.00	0.130	mg/kg	100		80-120		
Zinc	4.00	U	4.00	0.200	mg/kg	105		80-120		
Zirconium	5.00	U	5.00	0.840	mg/kg	105		80-120		
Batch number: 133360637002A	Sample number(s): 7295434-7295438,7295440-7295443									
Silver	0.200	U	0.200	0.0260	mg/kg	105		80-120		
Strontium	0.400	U	0.400	0.0680	mg/kg	96		80-120		
Thallium	0.200	U	0.200	0.0300	mg/kg	97		80-120		
Batch number: 133360637002B	Sample number(s): 7295434-7295438,7295440-7295443									
Selenium	0.400	U	0.400	0.100	mg/kg	108		80-120		
Batch number: 133360638002	Sample number(s): 7295434-7295438,7295440-7295443									
3a Mercury 7471A	0.0167	U	0.0167	0.0100	mg/kg	107		85-120		
Batch number: 133395713005	Sample number(s): 7295444-7295445									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	103	99	90-115	4	20
Batch number: 133430635002	Sample number(s): 7295444-7295445									
Aluminum	0.400	U	0.400	0.0828	mg/l	105	106	90-112	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	103	103	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	99	99	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	102	102	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	98	98	90-111	1	20
Boron	0.100	U	0.100	0.0084	mg/l	96	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	100	101	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	102	103	90-112	1	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	100	101	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	100	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	103	104	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	106	104	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	102	102	88-110	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	101	101	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	103	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	101	102	90-110	1	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	101	102	90-110	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	104	90-111	0	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	98	98	90-110	1	20
Potassium	1.00	U	1.00	0.0980	mg/l	97	98	90-110	1	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Sodium	2.00	U	2.00	0.167	mg/l	99	100	87-114	1	20
Tin	0.0400	U	0.0400	0.0029	mg/l	99	100	90-110	0	20
Titanium	0.0200	U	0.0200	0.0017	mg/l	103	103	90-113	0	20
Vanadium	0.0100	U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0040	J	0.0400	0.0020	mg/l	99	100	90-110	0	20
Zirconium	0.100	U	0.100	0.0084	mg/l	101	101	90-110	0	20
Batch number: 133430639002A	Sample number(s): 7295444-7295445									
Silver	0.0010	U	0.0010	0.00011	mg/l	106	97	90-115	10	20
Strontium	0.0020	U	0.0020	0.00034	mg/l	99	108	90-110	9	20
Thallium	0.0010	U	0.0010	0.00015	mg/l	103	107	90-115	4	20
Batch number: 133430639002B	Sample number(s): 7295444-7295445									
Selenium	0.0040	U	0.0040	0.00050	mg/l	106	103	90-120	2	20
Batch number: 13331987301A	Sample number(s): 7295445									
2b Chromium VI by EPA 7199	10.0	U	10.0	5.0	ug/l	99	98	90-110	2	20
Batch number: 13331039402A	Sample number(s): 7295434-7295438,7295440-7295443									
15a pH by 9045D						99		95-105		
Batch number: 13338003104A	Sample number(s): 7295444-7295445									
28b pH (9040B and 9040C)						100		90-110		
Batch number: 13340162401A	Sample number(s): 7295434-7295438,7295440-7295443									
14a Moisture Content by 160.3						101		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13338001	Sample number(s): 7295444-7295445									
2378-TCDD	2.00	U	2.00	0.410	pg/l	107		60-150		
12378-PeCDD	10.0	U	10.0	0.330	pg/l	107		60-150		
123478-HxCDD	0.350	J	10.0	0.237	pg/l	110		60-150		
123678-HxCDD	0.378	J	10.0	0.256	pg/l	113		60-150		
123789-HxCDD	0.502	J	10.0	0.249	pg/l	113		60-150		
1234678-HpCDD	0.542	J	10.0	0.311	pg/l	112		60-150		
OCDD	1.33	J	20.0	0.369	pg/l	111		60-150		
2378-TCDF	2.00	U	2.00	0.263	pg/l	110		60-150		
12378-PeCDF	0.561	J	10.0	0.196	pg/l	113		60-150		
23478-PeCDF	0.482	J	10.0	0.172	pg/l	116		60-150		
123478-HxCDF	0.228	J	10.0	0.136	pg/l	107		60-150		
123678-HxCDF	0.293	J	10.0	0.139	pg/l	107		60-150		
123789-HxCDF	0.701	J	10.0	0.167	pg/l	108		60-150		
234678-HxCDF	0.586	J	10.0	0.144	pg/l	108		60-150		
1234678-HpCDF	0.579	J	10.0	0.105	pg/l	106		60-150		
1234789-HpCDF	0.421	J	10.0	0.142	pg/l	107		60-150		
OCDF	2.14	J	20.0	0.480	pg/l	104		60-150		
Batch number: 13345002	Sample number(s): 7295434-7295438,7295440-7295443									
2378-TCDD	1.00	U	1.00	0.0595	ng/kg	96		67-158		
12378-PeCDD	5.00	U	5.00	0.0398	ng/kg	97		70-142		
123478-HxCDD	0.0274	J	5.00	0.0225	ng/kg	97		70-164		
123678-HxCDD	0.0354	J	5.00	0.0244	ng/kg	99		76-134		
123789-HxCDD	0.0457	J	5.00	0.0228	ng/kg	96		64-162		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
1234678-HpCDD	0.0965	J	5.00	0.0297	ng/kg	95		70-140		
OCDD	0.227	J	10.0	0.0252	ng/kg	92		78-144		
2378-TCDF	1.00	U	1.00	0.0528	ng/kg	98		75-158		
12378-PeCDF	5.00	U	5.00	0.0257	ng/kg	92		80-134		
23478-PeCDF	0.0394	J	5.00	0.0245	ng/kg	95		68-160		
123478-HxCDF	0.0682	J	5.00	0.0264	ng/kg	95		72-134		
123678-HxCDF	0.0382	J	5.00	0.0239	ng/kg	97		84-130		
123789-HxCDF	0.0882	J	5.00	0.0283	ng/kg	96		78-130		
234678-HxCDF	0.0320	J	5.00	0.0245	ng/kg	95		70-156		
1234678-HpCDF	0.0358	J	5.00	0.0131	ng/kg	95		82-122		
1234789-HpCDF	0.0522	J	5.00	0.0190	ng/kg	97		78-138		
OCDF	0.134	J	10.0	0.0425	ng/kg	89		63-170		
Batch number: 13338001	Sample number(s): 7295444-7295445									
TEQ WHO 2005 - EDLx0.0	0.131				pg/l					
Batch number: 13345002	Sample number(s): 7295434-7295438,7295440-7295443									
TEQ WHO 2005 - EDLx0.0	0.0130				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13338SLI026	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P293061								
Acenaphthene	99	100	48-127	0	30				
Acenaphthylene	98	101	49-121	3	30				
Anthracene	160*	136*	52-126	17	30				
Benzo(a)anthracene	333*	375*	44-143	11	30				
Benzo(a)pyrene	284*	337*	44-140	16	30				
Benzo(b)fluoranthene	342*	441*	26-142	24	30				
Benzo(e)pyrene	229*	254*	70-130	10	30				
Benzo(g,h,i)perylene	130	146*	33-141	11	30				
Benzo(k)fluoranthene	242*	249*	54-142	2	30				
Butylbenzylphthalate	115	120	49-151	4	30				
Di-n-butylphthalate	111	113	52-147	1	30				
Chrysene	318*	366*	29-148	13	30				
Dibenz(a,h)anthracene	97	103	20-137	5	30				
Diethylphthalate	102	109	43-145	6	30				
Dimethylphthalate	98	101	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	124	110	39-167	10	30				
Fluoranthene	680*	599*	40-148	13	30				
Fluorene	103	103	51-137	0	30				
Indeno(1,2,3-cd)pyrene	147*	160*	17-136	8	30				
1-Methylnaphthalene	96	96	50-131	0	30				
2-Methylnaphthalene	103	98	35-152	5	30				
Naphthalene	96	96	31-148	0	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodimethylamine	88	91	48-113	2	30				
Di-n-octylphthalate	132	135	52-162	1	30				
Phenanthrene	361*	243*	29-142	39*	30				
Pyrene	523*	490*	26-143	7	30				
Batch number: 13339A16A	Sample number(s): 7295435,7295441,7295443 UNSPK: P300108								
11a TPH by EPA 8015B GRO	85	92	69-123	3	30				
Batch number: 133390019A	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P293061								
PCB-1016	99	99	41-135	0	50				
PCB-1260	109	116	40-134	6	50				
Batch number: 133390014A	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P293061								
EFH (C12-C14)	103	102	49-123	1	20				
EFH (C15-C20)	122	129*	49-123	5	20				
EFH (C21-C30)	87	121	49-123	17	20				
EFH (C30-C40)	48*	86	49-123	14	20				
EFH (C8-C11)	85	86	49-123	2	20				
Batch number: 133390026A	Sample number(s): 7295436-7295437 UNSPK: 7295436								
m-Terphenyl	100	100	75-125	0	20				
o-Terphenyl	99	100	75-125	0	20				
p-Terphenyl	101	101	75-125	0	20				
Batch number: 133360637002	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P284471 BKG: P284471								
Aluminum	1850 (2)	2046 (2)	75-125	2	20	15,600	15,000	4	20
Antimony	59*	60*	75-125	2	20	3.96 U	3.96 U	0 (1)	20
Arsenic	98	100	75-125	1	20	4.73	4.53	4 (1)	20
Barium	99	98	75-125	1	20	95.7	87.6	9	20
Beryllium	99	99	75-125	0	20	0.610 J	0.568 J	7 (1)	20
Boron	99	98	75-125	1	20	4.26 J	4.01 J	6 (1)	20
Cadmium	98	97	75-125	1	20	0.296 J	0.256 J	14 (1)	20
Calcium	111 (2)	126 (2)	75-125	3	20	1,840	1,730	6	20
Chromium	109	107	75-125	1	20	18.5	17.6	5	20
Cobalt	98	97	75-125	1	20	5.43	4.79	13 (1)	20
Copper	105	105	75-125	0	20	8.13	7.57	7 (1)	20
Iron	-69 (2)	417 (2)	75-125	2	20	19,400	18,100	7	20
Lead	116	102	75-125	9	20	6.78	6.26	8 (1)	20
Lithium	102	103	75-125	1	20	19.1	17.9	6 (1)	20
Magnesium	95 (2)	111 (2)	75-125	1	20	3,800	3,510	8	20
Manganese	104 (2)	46 (2)	75-125	9	20	300	256	16	20
Molybdenum	99	99	75-125	1	20	0.597 J	0.409 J	37* (1)	20
Nickel	99	98	75-125	0	20	8.57	8.06	6 (1)	20
Phosphorus	94	99	75-125	2	20	221	202	9	20
Potassium	100	96	75-125	1	20	2,640	2,330	13	20
Sodium	97	97	75-125	0	20	68.5 J	65.8 J	4 (1)	20
Tin	91	90	75-125	1	20	2.64 J	2.46 J	7 (1)	20
Titanium	146 (2)	174 (2)	75-125	2	20	1,070	973	9	20
Vanadium	104	102	75-125	1	20	35.1	32.8	7	20
Zinc	99	100	75-125	1	20	49.6	45.5	9	20
Zirconium	97	96	75-125	1	20	1.90 J	2.56 J	29* (1)	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 133360637002A	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P284471 BKG: P284471								
Silver	100	102	75-125	2	20	0.0998 J	0.125 J	22* (1)	20
Strontium	94	131*	75-125	11	20	17.9	16.1	10	20
Thallium	91	102	75-125	6	20	0.269	0.234	14 (1)	20
Batch number: 133360637002B	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P284471 BKG: P284471								
Selenium	88	87	75-125	1	20	0.396 U	0.396 U	0 (1)	20
Batch number: 133360638002	Sample number(s): 7295434-7295438,7295440-7295443 UNSPK: P284471 BKG: P284471								
3a Mercury 7471A	108	104	65-135	3	20	0.0109 J	0.0125 J	14 (1)	20
Batch number: 13331039402A	Sample number(s): 7295434-7295438,7295440-7295443 BKG: 7295435								
15a pH by 9045D						6.48	6.46	0	3
Batch number: 13338003104A	Sample number(s): 7295444-7295445 BKG: P292183								
28b pH (9040B and 9040C)						7.4	7.5	0	3
Batch number: 13340162401A	Sample number(s): 7295434-7295438,7295440-7295443 BKG: P293061								
14a Moisture Content by 160.3						2.0	1.7	20	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13332WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7295445	91	94	95
Blank	81	84	85
LCS	99	100	102
LCSD	103	108	107
Limits:	44-137	62-141	51-136

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13336WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7295444	88	88	90
Blank	84	88	83
LCS	90	94	96
LCSD	97	101	101

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Surrogate Quality Control

Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13338SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7295434	80	84	89
7295435	84	85	91
7295436	89	94	99
7295437	90	90	99
7295438	78	75	86
7295440	87	89	94
7295441	87	87	92
7295442	85	80	93
7295443	87	86	96
Blank	96	99	107
LCS	86	88	95
MS	87	87	93
MSD	86	90	93
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13331B94A

	Trifluorotoluene-F
7295439	90
7295444	92
7295445	90
Blank	91
LCS	98
LCSD	98
Limits:	63-135

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13339A16A

	Trifluorotoluene-F
7295435	93
7295441	93
7295443	87
Blank	100
LCS	110
MS	87
MSD	77
Limits:	50-142

Analysis Name: 19b Formaldehyde 8315A
Batch number: 133310016A

	Butyraldehyde
7295445	94
Blank	92

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Surrogate Quality Control

LCS 96
LCSD 93

Limits: 36-155

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133370008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7295444	97	90
7295445	98	87
Blank	99	96
LCS	101	85
LCSD	110	101
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133390019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7295434	108	106
7295435	114	113
7295436	107	110
7295437	109	113
7295438	108	109
7295440	109	110
7295441	110	107
7295442	108	109
7295443	107	100
Blank	115	113
LCS	117	122*
LCSD	117	113
MS	111	117
MSD	112	119
Limits:	45-120	45-120

Analysis Name: 23b Terphenyls by 8015B
Batch number: 133320013A

	n-Triacontane-d62
7295444	101
Blank	107
LCS	112
LCSD	106
Limits:	36-160

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133360021A

	Chlorobenzene	Orthoterphenyl
7295444	93	90
7295445	94	90
Blank	93	91

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Surrogate Quality Control

LCS	108	99
LCSD	97	95
Limits:	45-126	69-119

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133390014A

	Chlorobenzene	Orthoterphenyl
7295434	93	95
7295435	91	89
7295436	79	88
7295437	92	101
7295438	74	80
7295440	74	74
7295441	101	62*
7295442	85	89
7295443	78	86
Blank	88	93
LCS	99	104
MS	96	102
MSD	96	101
Limits:	37-125	66-123

Analysis Name: 27a Terphenyls by 8015B
Batch number: 133390026A

	n-Triacontane-d62
7295436	116
7295437	101
Blank	105
LCS	109
MS	118
MSD	119
Limits:	19-152

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13338001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7295444	75	74	95	92	92	87
7295445	84	75	100	101	97	93
Blank	88	85	108	110	106	98
OPR	81	74	98	99	96	91
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7295444	81	69	64	65	79	79
7295445	88	73	68	65	84	85
Blank	92	79	73	73	96	94
OPR	88	79	73	66	87	88

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7295444	77	67	59	80	74	
7295445	82	67	62	80	76	
Blank	90	75	65	90	86	
OPR	84	74	66	82	76	

Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13345002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7295434	70	63	73	75	74	71
7295435	65	64	72	75	73	69
7295436	69	63	69	74	71	66
7295437	62	64	66	71	70	69
7295438	61	70	68	71	69	71
7295440	65	66	68	71	69	72
7295441	57	65	64	67	66	67
7295442	68	66	70	74	72	70
7295443	63	68	70	72	71	73
Blank	59	57	65	70	65	63
OPR	34	35	43	49	43	36

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7295434	82	70	71	67	83	83
7295435	87	70	69	71	83	82
7295436	96	75	69	70	81	82
7295437	87	75	80	70	81	81
7295438	85	75	76	76	80	78
7295440	85	71	76	74	81	81
7295441	83	76	76	72	78	78
7295442	85	74	78	74	83	81
7295443	86	77	81	73	79	77
Blank	79	61	62	63	77	77
OPR	64	41	36	41	53	53

Limits:	28-143	26-138	17-157	25-181	32-141	28-130
	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF	
7295434	82	84	84	65	65	
7295435	82	87	84	59	68	
7295436	82	91	89	59	66	
7295437	82	89	99	55	66	
7295438	81	88	90	53	67	
7295440	81	88	94	56	67	
7295441	78	85	94	48	63	
7295442	82	87	95	58	68	
7295443	78	84	90	57	67	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437148
Reported: 01/09/14 at 01:33 PM

Surrogate Quality Control

Blank	76	77	78	53	58
OPR	49	54	51	30	38
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1437148 7295434-45

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/26/2013
CarrierName: FedEx
AirbillNo: 797258714660

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131126-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-713-SA5A-SB-0.0-0.5	11/26/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-713-SA5A-SB-0.0-0.5	11/26/13 08:45	SO	None	1 - 4 oz glass	10 day													X																						
SL-713-SA5A-SB-2.5-3.5	11/26/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-713-SA5A-SB-2.5-3.5	11/26/13 09:00	SO	None	2 - Encore	10 day																				X															
SL-719-SA5A-SB-0.0-0.5	11/26/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X			X											
SL-719-SA5A-SB-0.0-0.5	11/26/13 09:40	SO	None	1 - 4 oz glass	10 day													X																					
SL-720-SA5A-SB-0.0-0.5	11/26/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X			X											
SL-720-SA5A-SB-0.0-0.5	11/26/13 10:10	SO	None	1 - 4 oz glass	10 day													X																					
SL-724-SA5A-SB-0.0-0.5	11/26/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-724-SA5A-SB-0.0-0.5	11/26/13 10:40	SO	None	1 - 4 oz glass	10 day													X																					
TB-112613	11/26/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																					X														
SL-738-SA5A-SB-0.0-0.5	11/26/13 01:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-738-SA5A-SB-0.0-0.5	11/26/13 01:15	SO	None	1 - 4 oz glass	10 day													X																					
SL-738-SA5A-SB-3.0-4.0	11/26/13 01:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-738-SA5A-SB-3.0-4.0	11/26/13 01:20	SO	None	2 - Encore	10 day																				X															
SL-767-SA5A-SB-0.0-0.5	11/26/13 01:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X														
SL-767-SA5A-SB-0.0-0.5	11/26/13 01:55	SO	None	1 - 4 oz glass	10 day													X																					
SL-767-SA5A-SB-2.5-3.5	11/26/13 02:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X														
SL-767-SA5A-SB-2.5-3.5	11/26/13 02:05	SO	None	1 - Encore	10 day																				X															

Rec by Brandy Bay
ELLE
112713
1015

13013 / 1437148 / 72954345

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 11/26/2013
CarrierName: FedEx
AirbillNo: 797258714660

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131126-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Revised COC NM 12/27/13

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Calc Nitrate, Nitrite, TKN	TOC SM 5310B	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-713-SA5A-SB-0.0-0.5	11/26/13 08:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-713-SA5A-SB-0.0-0.5	11/26/13 08:45	SO	None	1 - 4 oz glass	10 day													X																					
SL-713-SA5A-SB-2.5-3.5	11/26/13 09:00	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X													
SL-713-SA5A-SB-2.5-3.5	11/26/13 09:00	SO	None	2 - Encore	10 day																			X															
SL-719-SA5A-SB-0.0-0.5	11/26/13 09:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X			X										
SL-719-SA5A-SB-0.0-0.5	11/26/13 09:40	SO	None	1 - 4 oz glass	10 day													X																				
SL-720-SA5A-SB-0.0-0.5	11/26/13 10:10	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X			X										
SL-720-SA5A-SB-0.0-0.5	11/26/13 10:10	SO	None	1 - 4 oz glass	10 day													X																				
SL-724-SA5A-SB-0.0-0.5	11/26/13 10:40	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-724-SA5A-SB-0.0-0.5	11/26/13 10:40	SO	None	1 - 4 oz glass	10 day													X																				
TB-112613	11/26/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																			X														
SL-738-SA5A-SB-0.0-0.5	11/26/13 01:15	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-738-SA5A-SB-0.0-0.5	11/26/13 01:15	SO	None	1 - 4 oz glass	10 day													X																				
SL-738-SA5A-SB-3.0-4.0	11/26/13 01:20	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X													
SL-738-SA5A-SB-3.0-4.0	11/26/13 01:20	SO	None	2 - Encore	10 day																			X															
SL-767-SA5A-SB-0.0-0.5	11/26/13 01:55	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-767-SA5A-SB-0.0-0.5	11/26/13 01:55	SO	None	1 - 4 oz glass	10 day													X																				
SL-767-SA5A-SB-2.5-3.5	11/26/13 02:05	SO	None	2 - 16 oz glass	10 day	X	X					X		X	X			X								X													
SL-767-SA5A-SB-2.5-3.5	11/26/13 02:05	SO	None	1 - Encore	10 day																			X															

SSFL Phase 3 Chain of Custody

13013 1437148 7295434-45

CDM Smith

DateShipped: 11/26/2013
CarrierName: FedEx
AirbillNo: 797258714660

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131126-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate Confirm 6850/6860	Perchlorate 314.0/331	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes

Special Instructions:

Sampler: Pamela Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Pamela Hartman	112613	1600									
									Susan Hu	112913	1015

SSFL Phase 3 Chain of Custody

13013 1437148 7295434-45

CDM Smith

DateShipped: 11/26/2013

CarrierName: FedEx

AirbillNo: 797258714660

Contact Name: Pam Hartman

Contact Phone: (818)466-8007

COC No: 20131126-02

Cooler #: 2

Lab: Lancaster

Lab Phone: 717-556-7259

Lab Address: 2425 New Holland Pike, Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9040 (Water)	pH 9045 (Soil)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
EB1-112613	11/26/13 14:30	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																																
EB1-112613	11/26/13 14:30	WQ	None	1 - 250 mL Amber	10 day							X																												
EB1-112613	11/26/13 14:30	WQ	None	1 - 1 L Amber	10 day									X																									
EB1-112613	11/26/13 14:30	WQ	HNO3 pH<2	1 - 250 mL Amber	10 day										X																								
EB1-112613	11/26/13 14:30	WQ	None	1 - 250 mL Poly	10 day														X																			
EB1-112613	11/26/13 14:30	WQ	HCl	2 - 1 L Amber	10 day																				X													
EB1-112613	11/26/13 14:30	WQ	HCl	3 - 40 mL Vial	10 day																			X														
EB1-112613	11/26/13 14:30	WQ	HCl	1 - 1 L Amber	10 day																							X										

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	112613	1600									
									112713	1015	

SSFL Phase 3 Chain of Custody

13013 1437148 7295434-45

CDM Smith

DateShipped: 11/26/2013
CarrierName: FedEx
AirbillNo: 797258714660

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131126-03
Cooler #: 3
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
EB2-112613	11/26/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																																
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																													
EB2-112613	11/26/13 15:00	WQ	None	1 - 1 L Amber	10 day									X																										
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Amber	10 day										X																									
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Poly	10 day													X																						
EB2-112613	11/26/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																					X													
EB2-112613	11/26/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X															
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Amber	10 day																											X							
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Amber	10 day						X																												
EB2-112613	11/26/13 15:00	WQ	None	1 - 250 mL Poly	10 day															X																			

Special Instructions:

Sampler: Pamela Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	112613	1600									
									Burl/Th	112713	1015

From: Burgesser, Todd [BurgesserTE@cdmsmith.com]
Sent: Friday, December 13, 2013 3:31 PM
To: Nicole Maljovec; Zakowski, Cherie
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: RE: 11.26.13 SSFL- What TICs for EB?

Just morpholine

-----Original Message-----
From: Nicole Maljovec [mailto:nmaljovec@lancasterlabs.com]
Sent: Friday, December 13, 2013 1:30 PM
To: Zakowski, Cherie; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: RE: 11.26.13 SSFL- What TICs for EB?

The report may be delayed. We need to rerun the sample to get Morpholine, but the other two are done.

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Zakowski, Cherie [mailto:ZakowskiCA@cdmsmith.com]
Sent: Friday, December 13, 2013 3:19 PM
To: Nicole Maljovec; Burgesser, Todd
Cc: Hartman, Pamela; Mysel, Stefanie
Subject: RE: 11.26.13 SSFL- What TICs for EB?

Hello: We want all 3 analytes: Tetralin, Dowanol, and Morpholine. Is this correct Todd?

Thanks

Cherie Zakowski
Project Manager/Scientist
CDM Smith
555 17th Street, Suite 1100
Denver, CO 80202
Direct Phone: 720-264-1109
Main Phone: 303-383-2300
Fax: 303-308-3003

-----Original Message-----
From: Hartman, Pamela
Sent: Friday, December 13, 2013 8:28 AM
To: Nicole Maljovec; Mysel, Stefanie
Cc: Burgesser, Todd; Zakowski, Cherie
Subject: RE: 11.26.13 SSFL- What TICs for EB?

We definitely need Morpholine. I am not sure about the others.

Todd?

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Friday, December 13, 2013 3:18 AM
To: Hartman, Pamela; Mysel, Stefanie
Cc: Burgesser, Todd; Zakowski, Cherie

Subject: FW: 11.26.13 SSFL- What TICs for EB?

Good morning,
Quick question, EB2 is requesting TICs. I'm assuming this means Tetralin, Dowanol, and Morpholine. Is this correct?

Thanks,
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Hartman, Pamela [mailto:HartmanPM@cdmsmith.com]
Sent: Tuesday, November 26, 2013 7:08 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Mysel, Stefanie
Subject: 11.26.13 SSFL

Hi,

We shipped 3 coolers today with 2 equipment blanks and soil samples.
Please see attached COCs and spreadsheet.

We are done sampling for this week and will start shipping samples again on Monday. We will be sending an EB on Monday with Hex Cr.

Have a great Thanksgiving!

Pam

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1437148

Client/Project: CDM

Date of Receipt: 112213

Time of Receipt: 1015

Source Code: SO-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.1	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3	↓	3.8	↓	↓	↓	↓	
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Rec 1 Sm Amber for morpholine cap was loose Amber is half full

Unpacker Signature/Emp#: Brianely Bay 2299 **Date/Time:** 112213 1116

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 17, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 12/03/2013
Group Number: 1437889
SDG: PH136
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
EB-120213 Water	7298805
SL-616-SA5A-SB-0.0-0.5 Soil	7298806
SL-679-SA5A-SB-0.0-0.5 Soil	7298807

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1
Pesticides/PCBs	**SW-846 8082A**		**ug/l**		**ug/l**	**ug/l**	
13092	Aroclor 5432	63496-31-1	0.50	U	0.50	0.099	1
13092	Aroclor 5442	12642-23-8	0.50	U	0.50	0.099	1
13092	Aroclor 5460	11126-42-4	0.50	U	0.50	0.11	1
13092	PCB-1016	12674-11-2	0.50	U	0.50	0.099	1
13092	PCB-1221	11104-28-2	0.50	U	0.50	0.099	1
13092	PCB-1232	11141-16-5	0.50	U	0.50	0.20	1
13092	PCB-1242	53469-21-9	0.50	U	0.50	0.099	1
13092	PCB-1248	12672-29-6	0.50	U	0.50	0.099	1
13092	PCB-1254	11097-69-1	0.50	U	0.50	0.099	1
13092	PCB-1260	11096-82-5	0.50	U	0.50	0.15	1
13092	PCB-1262	37324-23-5	0.50	U	0.50	0.20	1
13092	PCB-1268	11100-14-4	0.50	U	0.50	0.16	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.11	U	0.11	0.053	1
10365	EFH (C15-C20)	n.a.	0.11	U	0.11	0.053	1
10365	EFH (C21-C30)	n.a.	0.11	U	0.11	0.053	1
10365	EFH (C30 - C40)	n.a.	0.53	U	0.53	0.11	1
10365	EFH (C8-C11)	n.a.	0.11	U	0.11	0.053	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
For all QC parameters which are outside project defined limits, but within the laboratory statistical limits, no corrective action is taken.

Metals	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.400	U	0.400	0.0828	1
07044	Antimony	7440-36-0	0.0400	U	0.0400	0.0053	1
07035	Arsenic	7440-38-2	0.0400	U	0.0400	0.0068	1
07046	Barium	7440-39-3	0.0100	U	0.0100	0.00033	1
07047	Beryllium	7440-41-7	0.0100	U	0.0100	0.00067	1
08014	Boron	7440-42-8	0.100	U	0.100	0.0084	1
07049	Cadmium	7440-43-9	0.0100	U	0.0100	0.00076	1
01750	Calcium	7440-70-2	0.400	U	0.400	0.0334	1
07051	Chromium	7440-47-3	0.0300	U	0.0300	0.0016	1
07052	Cobalt	7440-48-4	0.0100	U	0.0100	0.0013	1
07053	Copper	7440-50-8	0.0200	U	0.0200	0.0027	1
01754	Iron	7439-89-6	0.400	U	0.400	0.0430	1
07055	Lead	7439-92-1	0.0300	U	0.0300	0.0047	1
01756	Lithium	7439-93-2	0.0400	U	0.0400	0.0047	1
01757	Magnesium	7439-95-4	0.200	U	0.200	0.0167	1
07058	Manganese	7439-96-5	0.0100	U	0.0100	0.00083	1
07060	Molybdenum	7439-98-7	0.0200	U	0.0200	0.0017	1
07061	Nickel	7440-02-0	0.0200	U	0.0200	0.0015	1
10143	Phosphorus	7723-14-0	0.200	U	0.200	0.0418	1
01762	Potassium	7440-09-7	1.00	U	1.00	0.0980	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01767	Sodium	7440-23-5	2.00 U	2.00	0.167	1
07069	Tin	7440-31-5	0.0400 U	0.0400	0.0029	1
07070	Titanium	7440-32-6	0.0200 U	0.0200	0.0017	1
07071	Vanadium	7440-62-2	0.0100 U	0.0100	0.0020	1
07072	Zinc	7440-66-6	0.0022 J	0.0400	0.0020	1
10144	Zirconium	7440-67-7	0.100 U	0.100	0.0084	1
	SW-846 6020A		**mg/l**	**mg/l**	**mg/l**	
06041	Selenium	7782-49-2	0.0040 U	0.0040	0.00050	1
06042	Silver	7440-22-4	0.0010 U	0.0010	0.00011	1
06044	Strontium	7440-24-6	0.0020 U	0.0020	0.00034	1
06045	Thallium	7440-28-0	0.0010 U	0.0010	0.00015	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	3b Mercury 7470A	7439-97-6	0.00020 U	0.00020	0.000060	1
Wet Chemistry	**SW-846 9040C**		**Std. Units**	**Std. Units**	**Std. Units**	
12152	28b pH (9040B and 9040C)	n.a.	5.9	0.010	0.010	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received MRL*	As Received EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.26	U	2.26	0.477	1
10915	12378-PeCDD	40321-76-4	11.3	U	11.3	0.493	1
10915	123478-HxCDD	39227-28-6	0.360	JQ	11.3	0.296	1
10915	123678-HxCDD	57653-85-7	11.3	U	11.3	0.302	1
10915	123789-HxCDD	19408-74-3	11.3	U	11.3	0.295	1
10915	1234678-HpCDD	35822-46-9	0.915	JBQ	11.3	0.467	1
10915	OCDD	3268-87-9	1.35	JBQ	22.6	0.480	1
10915	2378-TCDF	51207-31-9	2.26	U	2.26	0.328	1
10915	12378-PeCDF	57117-41-6	0.616	JB	11.3	0.250	1
10915	23478-PeCDF	57117-31-4	11.3	U	11.3	0.236	1
10915	123478-HxCDF	70648-26-9	11.3	U	11.3	0.207	1
10915	123678-HxCDF	57117-44-9	11.3	U	11.3	0.208	1
10915	123789-HxCDF	72918-21-9	11.3	U	11.3	0.245	1
10915	234678-HxCDF	60851-34-5	11.3	U	11.3	0.202	1
10915	1234678-HpCDF	67562-39-4	0.767	JB	11.3	0.146	1
10915	1234789-HpCDF	55673-89-7	0.317	JBQ	11.3	0.181	1
10915	OCDF	39001-02-0	1.75	JBQ	22.6	0.558	1
D/F Toxic Equivalents	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	TEQ WHO 2005 - EDLx0.0	n.a.	0.0262				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	55	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	61	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	67	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	55	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received MRL*	As Received EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13339A94A	12/06/2013 12:14	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13339A94A	12/06/2013 12:14	Catherine J Schwarz	1
13092	21b PCBs and PCTs 8082A	SW-846 8082A	1	133370008A	12/04/2013 13:13	Monica M Souders	1
13093	PCB/PCT Waters Update IV	SW-846 3510C	1	133370008A	12/03/2013 17:30	Seth A Farrier	1
10365	10b TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133400015A	12/10/2013 01:13	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	133400015A	12/07/2013 16:40	JoElla L Rice	1
10915	17b Dioxin/Furan by EPA 1613B	EPA 1613B	1	13344001	12/11/2013 20:03	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	13344001	12/10/2013 13:45	Brett M Weidman	1
01743	Aluminum	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07044	Antimony	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07035	Arsenic	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07046	Barium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07047	Beryllium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
08014	Boron	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07049	Cadmium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01750	Calcium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07051	Chromium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07052	Cobalt	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07053	Copper	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01754	Iron	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07055	Lead	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01756	Lithium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01757	Magnesium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07058	Manganese	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07060	Molybdenum	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07061	Nickel	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
10143	Phosphorus	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01762	Potassium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
01767	Sodium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07069	Tin	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07070	Titanium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07071	Vanadium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
07072	Zinc	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
10144	Zirconium	SW-846 6010C	1	133430635002	12/11/2013 03:37	Tara L Snyder	1
06041	Selenium	SW-846 6020A	1	133430639002B	12/11/2013 15:31	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-120213 Water
SSFL Phase 3 Subarea 5A

LL Sample # WW 7298805
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 15:00 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

136EB SDG#: PH136-01EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06042	Silver	SW-846 6020A	1	133430639002A	12/11/2013 13:34	Parker D Lindstrom	1
06044	Strontium	SW-846 6020A	1	133430639002A	12/11/2013 13:34	Parker D Lindstrom	1
06045	Thallium	SW-846 6020A	1	133430639002A	12/11/2013 13:34	Parker D Lindstrom	1
00259	3b Mercury 7470A	SW-846 7470A	1	133395713005	12/07/2013 10:37	Damary Valentin	1
10635	WW SW846(IV) ICP Dig (tot rec)	SW-846 3005A	1	133430635002	12/10/2013 12:48	James L Mertz	1
10639	ICP/MS SW846 (IV) Water Digest	SW-846 3010A modified	1	133430639002	12/10/2013 11:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133395713005	12/06/2013 10:35	Damary Valentin	1
12152	28b pH (9040B and 9040C)	SW-846 9040C	1	13337003101A	12/03/2013 16:20	Kenneth A Bell	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.1	J	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	2.3		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.2	J	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	0.95	J	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.9		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	2.3		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	0.91	J	1.7	0.68	1
12969	Pyrene	129-00-0	2.0		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.4	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.2	1
13099	PCB-1242	53469-21-9	18	U	18	4.2	1
13099	PCB-1248	12672-29-6	18	U	18	3.4	1
13099	PCB-1254	11097-69-1	18	U	18	4.5	1
13099	PCB-1260	11096-82-5	18	U	18	4.0	1
13099	PCB-1262	37324-23-5	18	U	18	3.4	1
13099	PCB-1268	11100-14-4	18	U	18	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	6.1		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	18		10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		40.5	7.30	1
06944	Antimony	7440-36-0	4.05	U	4.05	0.749	1
06935	Arsenic	7440-38-2	4.60		4.05	0.709	1
06946	Barium	7440-39-3	99.8		1.01	0.0334	1
06947	Beryllium	7440-41-7	0.502	J	1.01	0.0679	1
07914	Boron	7440-42-8	1.74	J	10.1	0.851	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0770	1
01650	Calcium	7440-70-2	6,570		20.3	3.38	1
06951	Chromium	7440-47-3	21.8		3.04	0.162	1
06952	Cobalt	7440-48-4	4.88		1.01	0.100	1
06953	Copper	7440-50-8	18.8		2.03	0.294	1
01654	Iron	7439-89-6	20,000		40.5	3.67	1
06955	Lead	7439-92-1	5.23		3.04	0.506	1
01656	Lithium	7439-93-2	17.3		4.1	0.34	1
01657	Magnesium	7439-95-4	4,550		10.1	1.69	1
06958	Manganese	7439-96-5	241		1.01	0.0841	1
06960	Molybdenum	7439-98-7	1.35	J	2.03	0.172	1
06961	Nickel	7440-02-0	14.1		2.03	0.132	1
10145	Phosphorus	7723-14-0	687		10.1	2.93	1
01662	Potassium	7440-09-7	2,870		101	8.45	1
01667	Sodium	7440-23-5	138		101	16.9	1
06969	Tin	7440-31-5	2.68	J	10.1	0.223	1
06970	Titanium	7440-32-6	1,010		1.01	0.172	1
06971	Vanadium	7440-62-2	44.9		1.01	0.132	1
06972	Zinc	7440-66-6	62.6		4.05	0.203	1
10146	Zirconium	7440-67-7	3.98	J	5.06	0.851	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.308	J	0.405	0.101	2
06142	Silver	7440-22-4	0.203	U	0.203	0.0263	2
06144	Strontium	7440-24-6	44.3		0.405	0.0689	2
06145	Thallium	7440-28-0	0.199	J	0.203	0.0304	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0360		0.0167	0.010	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	6.49		0.0100	0.0100	1
	The pH was measured in water at 20.1 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	3.2		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.02	U	1.02	0.0555	1
11031	12378-PeCDD	40321-76-4	0.120	JQ	5.11	0.0478	1
11031	123478-HxCDD	39227-28-6	0.143	JBQ	5.11	0.0427	1
11031	123678-HxCDD	57653-85-7	0.480	JB	5.11	0.0457	1
11031	123789-HxCDD	19408-74-3	0.330	JBQ	5.11	0.0415	1
11031	1234678-HpCDD	35822-46-9	15.6	B	5.11	0.0347	1
11031	OCDD	3268-87-9	180	B	10.2	0.0401	1
11031	2378-TCDF	51207-31-9	1.02	U	1.02	0.0564	1
11031	12378-PeCDF	57117-41-6	0.241	JQ	5.11	0.0249	1
11031	23478-PeCDF	57117-31-4	0.148	JBQ	5.11	0.0223	1
11031	123478-HxCDF	70648-26-9	0.207	JB	5.11	0.0309	1
11031	123678-HxCDF	57117-44-9	0.174	JB	5.11	0.0293	1
11031	123789-HxCDF	72918-21-9	5.11	U	5.11	0.0308	1
11031	234678-HxCDF	60851-34-5	0.116	JBQ	5.11	0.0286	1
11031	1234678-HpCDF	67562-39-4	2.19	JB	5.11	0.0156	1
11031	1234789-HpCDF	55673-89-7	0.204	JB	5.11	0.0190	1
11031	OCDF	39001-02-0	5.59	JB	10.2	0.0317	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.322				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	86	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 12:03	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 19:43	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 09:43	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 12:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:49	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 13:03	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 13:03	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-616-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298806
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 14:45 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

61600 SDG#: PH136-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 13:03	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 13:03	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:28	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	0.51	J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	5.6		1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	5.3		1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	12		1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	5.7	J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	2.6		1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	3.9		1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	11		1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	0.80	J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	18	6.1	1
12969	Fluoranthene	206-44-0	12		1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8		1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	0.77	J	1.7	0.68	1
12969	Naphthalene	91-20-3	0.90	J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	3.7		1.7	0.68	1
12969	Pyrene	129-00-0	12		1.7	0.68	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	18	J	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	10	U	10	4.1	2
12952	EFH (C15-C20)	n.a.	6.4	J	10	4.1	2
12952	EFH (C21-C30)	n.a.	42		10	4.1	2
12952	EFH (C30-C40)	n.a.	140		20	8.1	2
12952	EFH (C8-C11)	n.a.	10	U	10	4.1	2
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		40.2	7.25	1
06944	Antimony	7440-36-0	4.02	U	4.02	0.744	1
06935	Arsenic	7440-38-2	3.07	J	4.02	0.704	1
06946	Barium	7440-39-3	94.9		1.01	0.0332	1
06947	Beryllium	7440-41-7	0.586	J	1.01	0.0674	1
07914	Boron	7440-42-8	6.01	J	10.1	0.845	1
06949	Cadmium	7440-43-9	1.01	U	1.01	0.0764	1
01650	Calcium	7440-70-2	3,290		20.1	3.36	1
06951	Chromium	7440-47-3	17.4		3.02	0.161	1
06952	Cobalt	7440-48-4	4.64		1.01	0.0995	1
06953	Copper	7440-50-8	17.6		2.01	0.292	1
01654	Iron	7439-89-6	19,300		40.2	3.64	1
06955	Lead	7439-92-1	10.3		3.02	0.503	1
01656	Lithium	7439-93-2	21.4		4.0	0.34	1
01657	Magnesium	7439-95-4	4,150		10.1	1.68	1
06958	Manganese	7439-96-5	295		1.01	0.0835	1
06960	Molybdenum	7439-98-7	0.263	J	2.01	0.171	1
06961	Nickel	7440-02-0	11.0		2.01	0.131	1
10145	Phosphorus	7723-14-0	406		10.1	2.91	1
01662	Potassium	7440-09-7	3,990		101	8.39	1
01667	Sodium	7440-23-5	96.7	J	101	16.8	1
06969	Tin	7440-31-5	2.92	J	10.1	0.221	1
06970	Titanium	7440-32-6	1,180		1.01	0.171	1
06971	Vanadium	7440-62-2	33.1		1.01	0.131	1
06972	Zinc	7440-66-6	65.0		4.02	0.201	1
10146	Zirconium	7440-67-7	3.33	J	5.03	0.845	1
	SW-846 6020A		**mg/kg**		**mg/kg**	**mg/kg**	
06141	Selenium	7782-49-2	0.120	J	0.402	0.101	2
06142	Silver	7440-22-4	0.0344	J	0.201	0.0261	2
06144	Strontium	7440-24-6	19.3		0.402	0.0684	2
06145	Thallium	7440-28-0	0.250		0.201	0.0302	2
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	3a Mercury 7471A	7439-97-6	0.0378		0.0170	0.0102	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	6.95		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0650	JQ	1.02	0.0608	1
11031	12378-PeCDD	40321-76-4	0.272	JQ	5.12	0.0494	1
11031	123478-HxCDD	39227-28-6	0.363	JBQ	5.12	0.0515	1
11031	123678-HxCDD	57653-85-7	1.36	JB	5.12	0.0547	1
11031	123789-HxCDD	19408-74-3	0.856	JB	5.12	0.0480	1
11031	1234678-HpCDD	35822-46-9	35.6	B	5.12	0.0503	1
11031	OCDD	3268-87-9	338	B	10.2	0.0417	1
11031	2378-TCDF	51207-31-9	0.177	J	1.02	0.0857	1
11031	12378-PeCDF	57117-41-6	0.561	J	5.12	0.0428	1
11031	23478-PeCDF	57117-31-4	1.02	JB	5.12	0.0378	1
11031	123478-HxCDF	70648-26-9	0.323	JBQ	5.12	0.0384	1
11031	123678-HxCDF	57117-44-9	0.480	JB	5.12	0.0373	1
11031	123789-HxCDF	72918-21-9	0.328	JB	5.12	0.0373	1
11031	234678-HxCDF	60851-34-5	0.689	JB	5.12	0.0358	1
11031	1234678-HpCDF	67562-39-4	5.14	B	5.12	0.0230	1
11031	1234789-HpCDF	55673-89-7	0.413	JBQ	5.12	0.0269	1
11031	OCDF	39001-02-0	13.4	B	10.2	0.0326	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	1.22				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	90	28 - 130
13C12-123789-HxCDD	93	28 - 130
13C12-1234678-HpCDD	100	23 - 140
13C12-OCDD	109	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	92	26 - 138
13C12-OCDF	98	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13338SLI026	12/16/2013 12:37	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13338SLI026	12/05/2013 09:00	Anna E Stager	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133390019A	12/09/2013 20:01	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133390019A	12/06/2013 03:00	Sherry L Morrow	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133390014A	12/07/2013 11:52	Heather E Williams	2
12959	EFH soil ext.(microwave)	SW-846 3546	1	133390014A	12/05/2013 22:10	Karen L Beyer	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13345002	12/13/2013 13:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13345002	12/11/2013 10:20	Chin F Ly	1
01643	Aluminum	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06944	Antimony	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06935	Arsenic	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06946	Barium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06947	Beryllium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
07914	Boron	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06949	Cadmium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01650	Calcium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06951	Chromium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06952	Cobalt	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06953	Copper	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01654	Iron	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06955	Lead	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01656	Lithium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01657	Magnesium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06958	Manganese	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06960	Molybdenum	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06961	Nickel	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01662	Potassium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
01667	Sodium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06969	Tin	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06970	Titanium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06971	Vanadium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06972	Zinc	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
10146	Zirconium	SW-846 6010C	1	133430637001	12/10/2013 11:54	Eric L Eby	1
06141	Selenium	SW-846 6020A	1	133430637001B	12/10/2013 13:05	Parker D Lindstrom	2
06142	Silver	SW-846 6020A	1	133430637001A	12/10/2013 13:05	Parker D Lindstrom	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-679-SA5A-SB-0.0-0.5 Soil
SSFL Phase 3 Subarea 5A

LL Sample # SW 7298807
LL Group # 1437889
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/02/2013 13:20 by PH

Submitted: 12/03/2013 09:40
Reported: 12/17/2013 12:16

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

67900 SDG#: PH136-03*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06144	Strontium	SW-846 6020A	1	133430637001A	12/10/2013 13:05	Parker D Lindstrom	2
06145	Thallium	SW-846 6020A	1	133430637001A	12/10/2013 13:05	Parker D Lindstrom	2
00159	3a Mercury 7471A	SW-846 7471B	1	133430638001	12/10/2013 10:30	Damary Valentin	1
10637	SW SW846 (IV)ICP/ICPMS Digest	SW-846 3050B	1	133430637001	12/10/2013 00:23	Annamaria Kuhns	1
10638	SW SW846 (IV) Hg Digest	SW-846 7471B	1	133430638001	12/10/2013 03:45	Annamaria Kuhns	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13339162401A	12/05/2013 23:48	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13338SLI026	Sample number(s): 7298806-7298807									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	102		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	104		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	103		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	107		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	104		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	108		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	97		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	101		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	111		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	115		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	110		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	107		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	98		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	111		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	106		85-122		
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	113		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	103		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	105		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	100		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	104		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	101		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	100		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	98		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	121		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	102		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	112		79-112		
Batch number: 13339A94A	Sample number(s): 7298805									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	113	114	75-135	1	30
Batch number: 133370008A	Sample number(s): 7298805									
Aroclor 5432	0.40	U	0.40	0.080	ug/l					
Aroclor 5442	0.40	U	0.40	0.080	ug/l	72	70	35-84	3	30
Aroclor 5460	0.40	U	0.40	0.088	ug/l					
PCB-1016	0.40	U	0.40	0.080	ug/l	95	101	67-117	7	30
PCB-1221	0.40	U	0.40	0.080	ug/l					
PCB-1232	0.40	U	0.40	0.16	ug/l					
PCB-1242	0.40	U	0.40	0.080	ug/l					
PCB-1248	0.40	U	0.40	0.080	ug/l					
PCB-1254	0.40	U	0.40	0.080	ug/l					
PCB-1260	0.40	U	0.40	0.12	ug/l	100	109	67-128	8	30
PCB-1262	0.40	U	0.40	0.16	ug/l					
PCB-1268	0.40	U	0.40	0.13	ug/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 133390019A	Sample number(s): 7298806-7298807									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	93	90	36-106	3	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	103		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	110		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133390014A	Sample number(s): 7298806-7298807									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	108		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	106		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	80		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	84		60-115		
Batch number: 133400015A	Sample number(s): 7298805									
EFH (C12-C14)	0.10	U	0.10	0.050	mg/l	82	88	70-130	6	30
EFH (C15-C20)	0.10	U	0.10	0.050	mg/l	89	96	70-130	8	30
EFH (C21-C30)	0.10	U	0.10	0.050	mg/l	88	96	70-130	8	30
EFH (C30 - C40)	0.50	U	0.50	0.10	mg/l	68*	83	70-130	20	30
EFH (C8-C11)	0.10	U	0.10	0.050	mg/l	66*	69*	70-130	4	30
Batch number: 133395713005	Sample number(s): 7298805									
3b Mercury 7470A	0.00020	U	0.00020	0.00006 0	mg/l	103	99	90-115	4	20
Batch number: 133430635002	Sample number(s): 7298805									
Aluminum	0.400	U	0.400	0.0828	mg/l	105	106	90-112	1	20
Antimony	0.0400	U	0.0400	0.0053	mg/l	103	103	88-111	0	20
Arsenic	0.0400	U	0.0400	0.0068	mg/l	99	99	90-113	0	20
Barium	0.0100	U	0.0100	0.00033	mg/l	102	102	90-110	0	20
Beryllium	0.0100	U	0.0100	0.00067	mg/l	98	98	90-111	1	20
Boron	0.100	U	0.100	0.0084	mg/l	96	97	90-110	0	20
Cadmium	0.0100	U	0.0100	0.00076	mg/l	100	101	90-112	1	20
Calcium	0.400	U	0.400	0.0334	mg/l	102	103	90-112	1	20
Chromium	0.0300	U	0.0300	0.0016	mg/l	100	101	90-110	1	20
Cobalt	0.0100	U	0.0100	0.0013	mg/l	100	101	90-110	1	20
Copper	0.0200	U	0.0200	0.0027	mg/l	103	104	90-112	1	20
Iron	0.400	U	0.400	0.0430	mg/l	106	104	90-112	1	20
Lead	0.0300	U	0.0300	0.0047	mg/l	102	102	88-110	0	20
Lithium	0.0400	U	0.0400	0.0047	mg/l	101	101	90-110	0	20
Magnesium	0.200	U	0.200	0.0167	mg/l	102	103	89-110	1	20
Manganese	0.0100	U	0.0100	0.00083	mg/l	101	102	90-110	1	20
Molybdenum	0.0200	U	0.0200	0.0017	mg/l	101	102	90-110	1	20
Nickel	0.0200	U	0.0200	0.0015	mg/l	104	104	90-111	0	20
Phosphorus	0.200	U	0.200	0.0418	mg/l	98	98	90-110	1	20
Potassium	1.00	U	1.00	0.0980	mg/l	97	98	90-110	1	20
Sodium	2.00	U	2.00	0.167	mg/l	99	100	87-114	1	20
Tin	0.0400	U	0.0400	0.0029	mg/l	99	100	90-110	0	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Analysis Name	Blank Result	Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Titanium	0.0200 U	0.0200	0.0017	mg/l	103	103	90-113	0	20
Vanadium	0.0100 U	0.0100	0.0020	mg/l	103	103	90-110	0	20
Zinc	0.0040 J	0.0400	0.0020	mg/l	99	100	90-110	0	20
Zirconium	0.100 U	0.100	0.0084	mg/l	101	101	90-110	0	20
Batch number: 133430637001	Sample number(s): 7298806-7298807								
Aluminum	40.0 U	40.0	7.21	mg/kg	107		80-120		
Antimony	4.00 U	4.00	0.740	mg/kg	108		80-120		
Arsenic	4.00 U	4.00	0.700	mg/kg	105		80-120		
Barium	1.00 U	1.00	0.0330	mg/kg	104		80-120		
Beryllium	1.00 U	1.00	0.0670	mg/kg	103		80-120		
Boron	10.0 U	10.0	0.840	mg/kg	97		80-120		
Cadmium	1.00 U	1.00	0.0760	mg/kg	103		80-120		
Calcium	5.64 J	20.0	3.34	mg/kg	105		80-120		
Chromium	3.00 U	3.00	0.160	mg/kg	102		80-120		
Cobalt	1.00 U	1.00	0.0990	mg/kg	104		80-120		
Copper	2.00 U	2.00	0.290	mg/kg	108		80-120		
Iron	40.0 U	40.0	3.62	mg/kg	107		80-120		
Lead	3.00 U	3.00	0.500	mg/kg	105		80-120		
Lithium	4.0 U	4.0	0.34	mg/kg	103		80-120		
Magnesium	1.91 J	10.0	1.67	mg/kg	104		80-120		
Manganese	1.00 U	1.00	0.0830	mg/kg	104		80-120		
Molybdenum	2.00 U	2.00	0.170	mg/kg	104		80-120		
Nickel	2.00 U	2.00	0.130	mg/kg	108		80-120		
Phosphorus	10.0 U	10.0	2.89	mg/kg	104		80-120		
Potassium	100 U	100.	8.34	mg/kg	104		80-120		
Sodium	100 U	100.	16.7	mg/kg	104		80-120		
Tin	1.58 J	10.0	0.220	mg/kg	102		80-120		
Titanium	1.00 U	1.00	0.170	mg/kg	105		80-120		
Vanadium	1.00 U	1.00	0.130	mg/kg	106		80-120		
Zinc	4.00 U	4.00	0.200	mg/kg	103		80-120		
Zirconium	5.00 U	5.00	0.840	mg/kg	103		80-120		
Batch number: 133430637001A	Sample number(s): 7298806-7298807								
Silver	0.200 U	0.200	0.0260	mg/kg	101		80-120		
Strontium	0.400 U	0.400	0.0680	mg/kg	101		80-120		
Thallium	0.200 U	0.200	0.0300	mg/kg	100		80-120		
Batch number: 133430637001B	Sample number(s): 7298806-7298807								
Selenium	0.400 U	0.400	0.100	mg/kg	107		80-120		
Batch number: 133430638001	Sample number(s): 7298806-7298807								
3a Mercury 7471A	0.0167 U	0.0167	0.0100	mg/kg	110		85-120		
Batch number: 133430639002A	Sample number(s): 7298805								
Silver	0.0010 U	0.0010	0.00011	mg/l	106	97	90-115	10	20
Strontium	0.0020 U	0.0020	0.00034	mg/l	99	108	90-110	9	20
Thallium	0.0010 U	0.0010	0.00015	mg/l	103	107	90-115	4	20
Batch number: 133430639002B	Sample number(s): 7298805								
Selenium	0.0040 U	0.0040	0.00050	mg/l	106	103	90-120	2	20
Batch number: 13337003101A	Sample number(s): 7298805								
28b pH (9040B and 9040C)					100		90-110		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13338039402A	Sample number(s): 7298806-7298807									
15a pH by 9045D						100		95-105		
Batch number: 13339162401A	Sample number(s): 7298806-7298807									
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13344001	Sample number(s): 7298805									
2378-TCDD	2.00	U	2.00	0.354	pg/l	102		60-150		
12378-PeCDD	10.0	U	10.0	0.315	pg/l	101		60-150		
123478-HxCDD	10.0	U	10.0	0.217	pg/l	105		60-150		
123678-HxCDD	0.405	J	10.0	0.234	pg/l	107		60-150		
123789-HxCDD	10.0	U	10.0	0.223	pg/l	104		60-150		
1234678-HpCDD	0.523	J	10.0	0.247	pg/l	102		60-150		
OCDD	1.38	J	20.0	0.357	pg/l	103		60-150		
2378-TCDF	0.379	J	2.00	0.245	pg/l	102		60-150		
12378-PeCDF	0.582	J	10.0	0.169	pg/l	103		60-150		
23478-PeCDF	0.304	J	10.0	0.165	pg/l	108		60-150		
123478-HxCDF	0.459	J	10.0	0.161	pg/l	104		60-150		
123678-HxCDF	0.312	J	10.0	0.167	pg/l	106		60-150		
123789-HxCDF	0.462	J	10.0	0.193	pg/l	105		60-150		
234678-HxCDF	0.240	J	10.0	0.163	pg/l	104		60-150		
1234678-HpCDF	0.393	J	10.0	0.100	pg/l	102		60-150		
1234789-HpCDF	0.347	J	10.0	0.136	pg/l	104		60-150		
OCDF	0.643	J	20.0	0.453	pg/l	100		60-150		
Batch number: 13345002	Sample number(s): 7298806-7298807									
2378-TCDD	1.00	U	1.00	0.0595	ng/kg	96		67-158		
12378-PeCDD	5.00	U	5.00	0.0398	ng/kg	97		70-142		
123478-HxCDD	0.0274	J	5.00	0.0225	ng/kg	97		70-164		
123678-HxCDD	0.0354	J	5.00	0.0244	ng/kg	99		76-134		
123789-HxCDD	0.0457	J	5.00	0.0228	ng/kg	96		64-162		
1234678-HpCDD	0.0965	J	5.00	0.0297	ng/kg	95		70-140		
OCDD	0.227	J	10.0	0.0252	ng/kg	92		78-144		
2378-TCDF	1.00	U	1.00	0.0528	ng/kg	98		75-158		
12378-PeCDF	5.00	U	5.00	0.0257	ng/kg	92		80-134		
23478-PeCDF	0.0394	J	5.00	0.0245	ng/kg	95		68-160		
123478-HxCDF	0.0682	J	5.00	0.0264	ng/kg	95		72-134		
123678-HxCDF	0.0382	J	5.00	0.0239	ng/kg	97		84-130		
123789-HxCDF	0.0882	J	5.00	0.0283	ng/kg	96		78-130		
234678-HxCDF	0.0320	J	5.00	0.0245	ng/kg	95		70-156		
1234678-HpCDF	0.0358	J	5.00	0.0131	ng/kg	95		82-122		
1234789-HpCDF	0.0522	J	5.00	0.0190	ng/kg	97		78-138		
OCDF	0.134	J	10.0	0.0425	ng/kg	89		63-170		
Batch number: 13344001	Sample number(s): 7298805									
TEQ WHO 2005 - EDLx0.0	0.0704				pg/l					
Batch number: 13345002	Sample number(s): 7298806-7298807									
TEQ WHO 2005 - EDLx0.0	0.0130				ng/kg					

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13338SLI026	Sample number(s): 7298806-7298807 UNSPK: P293061								
Acenaphthene	99	100	48-127	0	30				
Acenaphthylene	98	101	49-121	3	30				
Anthracene	160*	136*	52-126	17	30				
Benzo(a)anthracene	333*	375*	44-143	11	30				
Benzo(a)pyrene	284*	337*	44-140	16	30				
Benzo(b)fluoranthene	342*	441*	26-142	24	30				
Benzo(e)pyrene	229*	254*	70-130	10	30				
Benzo(g,h,i)perylene	130	146*	33-141	11	30				
Benzo(k)fluoranthene	242*	249*	54-142	2	30				
Butylbenzylphthalate	115	120	49-151	4	30				
Di-n-butylphthalate	111	113	52-147	1	30				
Chrysene	318*	366*	29-148	13	30				
Dibenz(a,h)anthracene	97	103	20-137	5	30				
Diethylphthalate	102	109	43-145	6	30				
Dimethylphthalate	98	101	58-129	3	30				
Bis(2-Ethylhexyl)phthalate	124	110	39-167	10	30				
Fluoranthene	680*	599*	40-148	13	30				
Fluorene	103	103	51-137	0	30				
Indeno(1,2,3-cd)pyrene	147*	160*	17-136	8	30				
1-Methylnaphthalene	96	96	50-131	0	30				
2-Methylnaphthalene	103	98	35-152	5	30				
Naphthalene	96	96	31-148	0	30				
N-Nitrosodimethylamine	88	91	48-113	2	30				
Di-n-octylphthalate	132	135	52-162	1	30				
Phenanthrene	361*	243*	29-142	39*	30				
Pyrene	523*	490*	26-143	7	30				
Batch number: 133390019A	Sample number(s): 7298806-7298807 UNSPK: P293061								
PCB-1016	99	99	41-135	0	50				
PCB-1260	109	116	40-134	6	50				
Batch number: 133390014A	Sample number(s): 7298806-7298807 UNSPK: P293061								
EFH (C12-C14)	103	102	49-123	1	20				
EFH (C15-C20)	122	129*	49-123	5	20				
EFH (C21-C30)	87	121	49-123	17	20				
EFH (C30-C40)	48*	86	49-123	14	20				
EFH (C8-C11)	85	86	49-123	2	20				
Batch number: 133430637001	Sample number(s): 7298806-7298807 UNSPK: P293061 BKG: P293061								
Aluminum	1327 (2)	1501 (2)	75-125	2	20	15,500	14,800	4	20
Antimony	68*	66*	75-125	3	20	4.00 U	4.00 U	0 (1)	20
Arsenic	103	103	75-125	0	20	3.10 J	2.89 J	7 (1)	20
Barium	100	100	75-125	1	20	87.1	85.5	2	20

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Beryllium	102	102	75-125	0	20	0.607 J	0.576 J	5 (1)	20
Boron	95	95	75-125	1	20	1.99 J	1.73 J	14 (1)	20
Cadmium	95	94	75-125	1	20	1.00 U	1.00 U	0 (1)	20
Calcium	124 (2)	153 (2)	75-125	4	20	2,580	2,560	1	20
Chromium	92	91	75-125	1	20	32.5	30.9	5	20
Cobalt	95	95	75-125	0	20	4.13	4.15	1 (1)	20
Copper	109	112	75-125	2	20	17.9	18.4	3	20
Iron	-227 (2)	390 (2)	75-125	3	20	19,200	18,400	4	20
Lead	94	95	75-125	1	20	7.35	6.93	6 (1)	20
Lithium	102	102	75-125	0	20	22.9	22.3	3	20
Magnesium	157 (2)	210 (2)	75-125	2	20	3,950	3,790	4	20
Manganese	105 (2)	130 (2)	75-125	4	20	286	290	1	20
Molybdenum	96	96	75-125	0	20	0.430 J	0.380 J	12 (1)	20
Nickel	98	99	75-125	0	20	10.1	10.1	1	20
Phosphorus	90	105	75-125	4	20	294	307	4	20
Potassium	132*	139*	75-125	1	20	3,130	3,110	1	20
Sodium	103	102	75-125	0	20	95.0 J	93.5 J	2 (1)	20
Tin	90	90	75-125	0	20	3.04 J	2.79 J	8 (1)	20
Titanium	285 (2)	359 (2)	75-125	5	20	1,070	1,070	0	20
Vanadium	106	108	75-125	1	20	32.2	31.3	3	20
Zinc	66*	69*	75-125	1	20	113	102	11	20
Zirconium	96	95	75-125	1	20	2.59 J	2.78 J	7 (1)	20
Batch number: 133430637001A	Sample number(s): 7298806-7298807 UNSPK: P293061 BKG: P293061								
Silver	109	106	75-125	1	20	13.3	15.0	12	20
Strontium	102	107	75-125	1	20	19.4	19.6	1	20
Thallium	115	111	75-125	3	20	0.224	0.224	0 (1)	20
Batch number: 133430637001B	Sample number(s): 7298806-7298807 UNSPK: P293061 BKG: P293061								
Selenium	100	102	75-125	3	20	0.181 J	0.177 J	2 (1)	20
Batch number: 133430638001	Sample number(s): 7298806-7298807 UNSPK: P293061 BKG: P293061								
3a Mercury 7471A	120	111	65-135	9	20	0.0390	0.0419	7 (1)	20
Batch number: 13337003101A	Sample number(s): 7298805 BKG: P298892								
28b pH (9040B and 9040C)						7.3	7.3	0	3
Batch number: 13338039402A	Sample number(s): 7298806-7298807 BKG: P300108								
15a pH by 9045D						7.60	7.53	1	3
Batch number: 13339162401A	Sample number(s): 7298806-7298807 BKG: P290760								
14a Moisture Content by 160.3						2.4	2.3	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Surrogate Quality Control

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13338SLI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7298806	91	94	99
7298807	89	93	99
Blank	96	99	107
LCS	86	88	95
MS	87	87	93
MSD	86	90	93
Limits:	54-129	59-125	61-125

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13339A94A

	Trifluorotoluene-F
7298805	91
Blank	87
LCS	92
LCSD	92
Limits:	63-135

Analysis Name: 21b PCBs and PCTs 8082A
Batch number: 133370008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7298805	104	78
Blank	99	96
LCS	101	85
LCSD	110	101
Limits:	45-120	45-120

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133390019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7298806	108	102
7298807	107	102
Blank	115	113
LCS	117	122*
LCSD	117	113
MS	111	117
MSD	112	119
Limits:	45-120	45-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133390014A

	Chlorobenzene	Orthoterphenyl
7298806	81	87
7298807	76	84

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Surrogate Quality Control

Blank	88	93
LCS	99	104
MS	96	102
MSD	96	101
Limits:	37-125	66-123

Analysis Name: 10b TPH by EPA 8015B (DRO)
Batch number: 133400015A

	Chlorobenzene	Orthoterphenyl
7298805	84	82
Blank	85	84
LCS	89	85
LCSD	91	90
Limits:	45-126	69-119

Analysis Name: 17b Dioxin/Furan by EPA 1613B
Batch number: 13344001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7298805	71	61	79	77	75	71
Blank	90	77	100	100	97	91
OPR	69	63	79	78	77	73
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD
7298805	67	59	55	55	70	70
Blank	86	74	65	70	88	91
OPR	68	61	55	58	71	72
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7298805	69	61	52	67	62
Blank	87	74	62	82	82
OPR	70	60	52	68	66
Limits:	28-130	23-140	17-157	24-169	24-185

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13345002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7298806	69	75	73	75	74	77
7298807	76	82	79	81	81	88
Blank	59	57	65	70	65	63
OPR	34	35	43	49	43	36
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1437889
Reported: 12/17/13 at 12:16 PM

Surrogate Quality Control

7298806	88	80	86	80	82	82
7298807	95	92	98	88	87	90
Blank	79	61	62	63	77	77
OPR	64	41	36	41	53	53
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7298806	83	88	95	63	74
7298807	93	100	109	69	80
Blank	76	77	78	53	58
OPR	49	54	51	30	38
Limits:	28-130	23-140	17-157	24-169	24-185

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3013 1437889 7298805-07

SSFL Phase 3 Chain of Custody

CDM Smith

DateShipped: 12/2/2013
CarrierName: FedEx
AirbillNo: 797290597399

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131202-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
EB-120213	12/2/13 15:00	WQ	HNO3 pH<2	1 - 250 mL Poly	10 day	X		X																															
EB-120213	12/2/13 15:00	WQ	HCl	2 - 1 L Amber	10 day																				X														
EB-120213	12/2/13 15:00	WQ	HCl	3 - 40 mL Vial	10 day																			X														
EB-120213	12/2/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																										
EB-120213	12/2/13 15:00	WQ	None	1 - 250 mL Poly	10 day										X																							
EB-120213	12/2/13 15:00	WQ	NaOH	1 - 250 mL Poly	10 day														X																		
EB-120213	12/2/13 15:00	WQ	None	1 - 1 L Amber	10 day									X																								

Special Instructions:

Sampler: Pamela Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
Paul	12.02.13	1630									

12.3.13 1545 2014 (3)
12.3.13 12.3.13 940

SSFL Phase 3 Chain of Custody

3013 1437889 7298805-07

CDM Smith

DateShipped: 12/2/2013
CarrierName: FedEx
AirbillNo: 797290597399

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 220131202-02
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-616-SA5A-SB-0.0-0.5	12/2/13 02:45	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-616-SA5A-SB-0.0-0.5	12/2/13 02:45	SO	None	1 - 4 oz glass	10 day													X																					
SL-679-SA5A-SB-0.0-0.5	12/2/13 01:20	SO	None	2 - SS-Sleeve	10 day	X	X					X		X	X											X													
SL-679-SA5A-SB-0.0-0.5	12/2/13 01:20	SO	None	1 - 4 oz glass	10 day													X																					

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	12.02.13	1638									
									Branch / Bauer	12.3.13	940

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdmsmith.com]
Sent: Tuesday, December 03, 2013 12:03 PM
To: Nicole Maljovec
Cc: Zakowski, Cherie; Burgesser, Todd
Subject: RE: 12.02.12 SSFL- EB Volume Issues, PAHs or PCBs?

Nicole

We will recollect PAHs today. Please go ahead with the PBCs and the rest of the tests.

Thank you!

Pam

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Tuesday, December 03, 2013 8:26 AM
To: Hartman, Pamela; Burgesser, Todd; Zakowski, Cherie
Cc: Mysel, Stefanie; Anneliese H. Owen
Subject: 12.02.12 SSFL- EB Volume Issues, PAHs or PCBs?

Good morning all,
We have limited volume issues with the equipment blank. We have 1 liter (unpreserved) for dioxins, 1x 250mL amber bottle for PCBs/PCTs, 2 x 1 liter HCl preserved bottles for TPH-EFH, and 1x 250mL plastic bottle for PAHs.

The plastic 250mL bottle can't be used for PAHs. The phthalate compounds in the plastic will/have leached out into the water and will be detected in the PAH test. So that bottle is out.

Unfortunately, we can't use the extra HCL preserved liter for any other test. So, which test is more important, PCBs or PAHs? We will use the
1 x 250ml amber bottles for this and hope that none of the tests need to be re-extracted.

Thanks!
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Hartman, Pamela [mailto:HartmanPM@cdmsmith.com]
Sent: Monday, December 02, 2013 7:11 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Mysel, Stefanie
Subject: 12.02.12 SSFL

Nicole Maljovec

From: Mysel, Stefanie [MyselSJ@cdmsmith.com]
Sent: Friday, December 13, 2013 7:30 AM
To: Nicole Maljovec; Hartman, Pamela
Subject: RE: 12.02.12 SSFL- Confirming times

Yes. Soil was collected in the afternoon. You can enter the times like you would normally. I will send a revised coc when I get to the site. As for your other questions I have to check and get back to you once I get to the site.

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------
From: Nicole Maljovec <nmaljovec@lancasterlabs.com>
Date: 12/13/2013 3:43 AM (GMT-08:00)
To: "Hartman, Pamela" <HartmanPM@cdmsmith.com>,"Mysel, Stefanie" <MyselSJ@cdmsmith.com>
Subject: FW: 12.02.12 SSFL- Confirming times

One more question for you. We assumed the collection times for the soils were in the PM, so we entered them in military time. Does that match your field log?

Thanks,
Nicole

Nicole Maljovec
Eurofins Lancaster Labs
Phone: 717-556-7259

-----Original Message-----
From: Hartman, Pamela [mailto:HartmanPM@cdmsmith.com]
Sent: Monday, December 02, 2013 7:11 PM
To: !US19_SSFLShip; Burgesser, Todd
Cc: Mysel, Stefanie
Subject: 12.02.12 SSFL

Please see attached COC. We shipped soil and water samples from SA5A today.

Thanks

Pamela Hartman
CDM Smith
523 West Sixth Street Suite 400
Los Angeles, CA 90014
714 900 0916 (Cell)

eurofins | Lancaster Laboratories

1437889

Environmental Sample Administration Receipt Documentation Log

Client/Project: COM

Date of Receipt: 12.3.13

Time of Receipt: 940

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.1	TB	WI	Y	B	
2	↓	0.6	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brandy Bauer 2299 **Date/Time:** 12.3.13 1009

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

December 30, 2013

Project: SSFL Phase 3 Sampling

Submittal Date: 12/04/2013
Group Number: 1438204
SDG: PH138
PO Number: 1204-002-001-AL
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SL-502-NBZ-SB-0.0-0.5 Soil	7300094
SL-502-NBZ-SB-4.0-5.0 Soil	7300095
SL-503-NBZ-SB-0.0-0.5 Soil	7300096
SL-503-NBZ-SB-2.0-3.0 Soil	7300097
SL-504-NBZ-SB-0.0-0.5 Soil	7300098
SL-504-NBZ-SB-0.0-0.5MS Soil	7300099
SL-504-NBZ-SB-0.0-0.5MSD Soil	7300100
SL-804-NBZ-SB-0.0-0.5 Soil	7300101
SL-530-NBZ-SB-0.0-0.5 Soil	7300102
SL-531-NBZ-SB-0.0-0.5 Soil	7300103
SL-532-NBZ-SB-0.0-0.5 Soil	7300104
SL-533-NBZ-SB-0.0-0.5 Soil	7300105
TB-120313 Water	7300106
SL-509-NBZ-SB-0.0-0.5 Soil	7300107
SL-509-NBZ-SB-2.5-3.5 Soil	7300108
SL-509-NBZ-SB-2.5-3.5MS Soil	7300109
SL-509-NBZ-SB-2.5-3.5MSD Soil	7300110
SL-509-NBZ-SB-2.5-3.5DUP Soil	7300111
SL-809-NBZ-SB-2.5-3.5 Soil	7300112
SL-510-NBZ-SB-0.0-0.5 Soil	7300113
SL-510-NBZ-SB-4.0-5.0 Soil	7300114
EB-120313 Water	7300115

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO Eurofins Lancaster Labs Env Attn: Nicole Maljovec

Respectfully Submitted,

Nicole L. Maljovec
Principal Specialist Group Leader

(717) 556-7259

Sample Description: SL-502-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300094
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH138-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.89	U	0.89	0.18	1
10590	Alpha BHC	319-84-6	0.89	U	0.89	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.89	U	0.89	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.3	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.36	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.36	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.38	1
10590	Delta BHC	319-86-8	0.89	U	0.89	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.36	1
10590	Endosulfan I	959-98-8	0.89	U	0.89	0.24	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.36	1
10590	Endrin	72-20-8	1.8	U	1.8	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.36	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.65	1
10590	Heptachlor	76-44-8	0.89	U	0.89	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.89	U	0.89	0.18	1
10590	Methoxychlor	72-43-5	7.2	U	7.2	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C15-C20)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C21-C30)	n.a.	5.4	U	5.4	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.3	1
12952	EFH (C8-C11)	n.a.	5.4	U	5.4	2.2	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	7.2		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300094
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50200 SDG#: PH138-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 12:28	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 00:48	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300095
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:35 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH138-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.25
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.92	U	0.92	0.19	1
10590	Alpha BHC	319-84-6	0.92	U	0.92	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.1	1
10590	Gamma BHC - Lindane	58-89-9	0.92	U	0.92	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.39	1
10590	Delta BHC	319-86-8	0.92	U	0.92	0.50	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.92	U	0.92	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.66	1
10590	Heptachlor	76-44-8	0.92	U	0.92	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.92	U	0.92	0.19	1
10590	Methoxychlor	72-43-5	7.4	U	7.4	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.39	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	9.4		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-502-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300095
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:35 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50245 SDG#: PH138-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 02:12	Laura M Krieger	25.25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:25	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:26	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 12:44	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 01:10	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300096
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:00 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH138-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	0.37	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.62	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	6.5		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	24		10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	3.8		0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300096
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:00 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50300 SDG#: PH138-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 12:59	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 01:31	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-NBZ-SB-2.0-3.0 Soil
SSFL NBZ

LL Sample # SW 7300097
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50323 SDG#: PH138-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.0	U	1.0	0.2	25
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.0		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-503-NBZ-SB-2.0-3.0 Soil
SSFL NBZ

LL Sample # SW 7300097
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50323 SDG#: PH138-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 02:49	Laura M Krieger	25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:27	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:27	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 13:14	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 01:53	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300098
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300098
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 13:29	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 02:15	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5MS Soil
SSFL NBZ

LL Sample # SW 7300099
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.3		0.85	0.17	1
10590	Alpha BHC	319-84-6	3.5		0.85	0.17	1
10590	Beta BHC	319-85-7	3.4		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.6		0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	7.3		1.7	0.34	1
10590	p,p-DDE	72-55-9	7.6		1.7	0.34	1
10590	p,p-DDT	50-29-3	10		1.7	0.36	1
10590	Delta BHC	319-86-8	3.6		0.85	0.46	1
10590	Dieldrin	60-57-1	7.3		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.0		0.85	0.22	1
10590	Endosulfan II	33213-65-9	7.0		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.0		1.7	0.34	1
10590	Endrin	72-20-8	7.5		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.1		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	6.5		1.8	0.61	1
10590	Heptachlor	76-44-8	3.2		0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.8		0.85	0.17	1
10590	Methoxychlor	72-43-5	36		6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3		5.1	2.0	1
12952	EFH (C15-C20)	n.a.	12		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	44		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	86		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.4	J	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 13:44	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5MS Soil
SSFL NBZ

LL Sample # SW 7300099
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 02:36	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5MSD Soil
SSFL NBZ

LL Sample # SW 7300100
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.4		0.84	0.17	1
10590	Alpha BHC	319-84-6	3.6		0.84	0.17	1
10590	Beta BHC	319-85-7	3.5		1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	3.7		0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	7.7		1.7	0.34	1
10590	p,p-DDE	72-55-9	8.1		1.7	0.34	1
10590	p,p-DDT	50-29-3	11		1.7	0.36	1
10590	Delta BHC	319-86-8	3.9		0.84	0.46	1
10590	Dieldrin	60-57-1	7.4		1.7	0.34	1
10590	Endosulfan I	959-98-8	3.1		0.84	0.22	1
10590	Endosulfan II	33213-65-9	7.4		1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	7.2		1.7	0.34	1
10590	Endrin	72-20-8	7.7		1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	6.4		1.7	0.34	1
10590	Endrin Ketone	53494-70-5	6.7		1.8	0.61	1
10590	Heptachlor	76-44-8	3.4		0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	3.9		0.84	0.17	1
10590	Methoxychlor	72-43-5	38		6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.4		5.1	2.0	1
12952	EFH (C15-C20)	n.a.	8.8		5.1	2.0	1
12952	EFH (C21-C30)	n.a.	14		5.1	2.0	1
12952	EFH (C30-C40)	n.a.	16		10	4.1	1
12952	EFH (C8-C11)	n.a.	4.6	J	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1
11626	14a Moisture Content by 160.3	n.a.	2.2		0.10	0.10	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-504-NBZ-SB-0.0-0.5MSD Soil
SSFL NBZ

LL Sample # SW 7300100
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50400 SDG#: PH138-05MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 14:00	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 02:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300101
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:55 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80400 SDG#: PH138-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.83	U	0.83	0.17	1
10590	Alpha BHC	319-84-6	0.83	U	0.83	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.83	U	0.83	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.0	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.94	1
10590	Delta BHC	319-86-8	0.83	U	0.83	0.45	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.83	U	0.83	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.60	1
10590	Heptachlor	76-44-8	0.83	U	0.83	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.83	U	0.83	0.17	1
10590	Methoxychlor	72-43-5	6.7	U	6.7	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	1.9		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-804-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300101
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:55 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

80400 SDG#: PH138-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 14:15	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 03:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300102
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH138-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.35	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.35	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	4.2	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.6		0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-530-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300102
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 09:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53000 SDG#: PH138-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 14:30	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 03:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300103
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:50 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH138-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.84	U	0.84	0.17	1
10590	Alpha BHC	319-84-6	0.84	U	0.84	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.97	1
10590	Gamma BHC - Lindane	58-89-9	0.84	U	0.84	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.33	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.33	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.84	U	0.84	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.33	1
10590	Endosulfan I	959-98-8	0.84	U	0.84	0.22	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.33	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.33	1
10590	Endrin	72-20-8	1.7	U	1.7	0.33	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.33	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.84	U	0.84	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.84	U	0.84	0.17	1
10590	Methoxychlor	72-43-5	6.8	U	6.8	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	33	U	33	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	7.9	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.1		0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-531-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300103
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:50 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53100 SDG#: PH138-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 14:45	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 04:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300104
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH138-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	2.0	U	2.0	0.99	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.0	J	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.62	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.7		0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

Sample Description: SL-532-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300104
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 10:20 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53200 SDG#: PH138-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133440020A	12/16/2013 16:02	Jamie L Brillhart	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133440020A	12/11/2013 07:30	Joseph S Feister	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 04:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-533-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300105
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:05 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53300 SDG#: PH138-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	37	U	37	12	1
10401	Dalapon	75-99-0	91	U	91	45	1
10401	2,4-DB	94-82-6	27	U	27	27	1
10401	Dicamba	1918-00-9	12	U	12	4.1	1
10401	Dinoseb	88-85-7	24	U	24	9.1	1
	The QC window for dinoseb is advisory due to the erratic performance of the analyte using this method.						
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	9.1	1
10401	MCPA	94-74-6	2,500	U	2,500	770	1
10401	MCPP (Mecoprop)	93-65-2	2,500	U	2,500	760	1
10401	2,4,5-T	93-76-5	1.7	U	1.7	0.83	1
10401	2,4,5-TP	93-72-1	1.7	U	1.7	0.76	1
	Reporting limits were raised due to interference from the sample matrix.						
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	2.8	J	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	6.4	J	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	2.1		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	21a Herbicides by EPA 8151A	SW-846 8151A	1	133450034A	12/15/2013 22:10	Melissa McDermott	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	133450034A	12/12/2013 06:45	Kerrie A Freeburn	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 04:46	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-533-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300105
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:05 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

53300 SDG#: PH138-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-120313 Water
SSFL NBZ

LL Sample # WW 7300106
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 08:00

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

TB138 SDG#: PH138-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	50	U	50	20	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08229	11b TPH by EPA 8015B GRO	TPH GRO SW-8015B	1	13339A94A	12/06/2013 12:39	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	13339A94A	12/06/2013 12:39	Catherine J Schwarz	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300107
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:15 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH138-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.34	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	17	U	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18	U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18	U	18	6.1	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18	U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18	U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	6.1	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.68	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.68	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18	U	18	6.1	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.68	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.68	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.85	U	0.85	0.17	1
10590	Alpha BHC	319-84-6	0.85	U	0.85	0.17	1
10590	Beta BHC	319-85-7	1.9	U	1.9	0.98	1
10590	Gamma BHC - Lindane	58-89-9	0.85	U	0.85	0.17	1
10590	Chlordane	57-74-9	17	U	17	4.1	1
10590	p,p-DDD	72-54-8	1.7	U	1.7	0.34	1
10590	p,p-DDE	72-55-9	1.7	U	1.7	0.34	1
10590	p,p-DDT	50-29-3	1.7	U	1.7	0.36	1
10590	Delta BHC	319-86-8	0.85	U	0.85	0.46	1
10590	Dieldrin	60-57-1	1.7	U	1.7	0.34	1
10590	Endosulfan I	959-98-8	0.85	U	0.85	0.23	1
10590	Endosulfan II	33213-65-9	1.7	U	1.7	0.34	1
10590	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	0.34	1
10590	Endrin	72-20-8	1.7	U	1.7	0.34	1
10590	Endrin Aldehyde	7421-93-4	1.7	U	1.7	0.34	1
10590	Endrin Ketone	53494-70-5	1.8	U	1.8	0.61	1
10590	Heptachlor	76-44-8	0.85	U	0.85	0.17	1
10590	Heptachlor Epoxide	1024-57-3	0.85	U	0.85	0.17	1
10590	Methoxychlor	72-43-5	6.9	U	6.9	1.7	1
10590	Mirex	2385-85-5	1.7	U	1.7	0.36	1
10590	Toxaphene	8001-35-2	34	U	34	14	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300107
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:15 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH138-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	34	U	34	10	1
13099	Aroclor 5442	12642-23-8	34	U	34	10	1
13099	Aroclor 5460	11126-42-4	34	U	34	10	1
13099	PCB-1016	12674-11-2	17	U	17	3.4	1
13099	PCB-1221	11104-28-2	17	U	17	5.2	1
13099	PCB-1232	11141-16-5	17	U	17	4.2	1
13099	PCB-1242	53469-21-9	17	U	17	4.2	1
13099	PCB-1248	12672-29-6	17	U	17	3.4	1
13099	PCB-1254	11097-69-1	17	U	17	4.5	1
13099	PCB-1260	11096-82-5	17	U	17	4.0	1
13099	PCB-1262	37324-23-5	17	U	17	3.4	1
13099	PCB-1268	11100-14-4	17	U	17	3.4	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C15-C20)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C21-C30)	n.a.	5.1	U	5.1	2.0	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.1	1
12952	EFH (C8-C11)	n.a.	5.1	U	5.1	2.0	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20.3 C.	n.a.	7.23		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	2.4		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300107
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:15 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH138-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0771 JBQ	0.996	0.0712	1
11031	12378-PeCDD	40321-76-4	4.98 U	4.98	0.0436	1
11031	123478-HxCDD	39227-28-6	4.98 U	4.98	0.0397	1
11031	123678-HxCDD	57653-85-7	0.0801 JBQ	4.98	0.0410	1
11031	123789-HxCDD	19408-74-3	0.0603 JBQ	4.98	0.0377	1
11031	1234678-HpCDD	35822-46-9	0.626 JBQ	4.98	0.0662	1
11031	OCDD	3268-87-9	2.95 JB	9.96	0.0537	1
11031	2378-TCDF	51207-31-9	0.996 U	0.996	0.0555	1
11031	12378-PeCDF	57117-41-6	0.0635 JBQ	4.98	0.0322	1
11031	23478-PeCDF	57117-31-4	4.98 U	4.98	0.0329	1
11031	123478-HxCDF	70648-26-9	0.831 JB	4.98	0.0586	1
11031	123678-HxCDF	57117-44-9	0.139 JBQ	4.98	0.0527	1
11031	123789-HxCDF	72918-21-9	0.0851 JB	4.98	0.0589	1
11031	234678-HxCDF	60851-34-5	0.0564 JBQ	4.98	0.0505	1
11031	1234678-HpCDF	67562-39-4	0.196 JBQ	4.98	0.0511	1
11031	1234789-HpCDF	55673-89-7	0.155 JBQ	4.98	0.0795	1
11031	OCDF	39001-02-0	0.390 JBQ	9.96	0.0790	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0925			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300107
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:15 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH138-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300107
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:15 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50900 SDG#: PH138-12

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 07:51	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 20:37	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 10:36	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440024A	12/12/2013 05:08	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440024A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 04:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401A	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300108
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.1
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300108
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.60		0.0100	0.0100	1
	The pH was measured in water at 20.7 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300108
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.04	U	1.04	0.0557	1
11031	12378-PeCDD	40321-76-4	5.18	U	5.18	0.0416	1
11031	123478-HxCDD	39227-28-6	0.0880	JBQ	5.18	0.0468	1
11031	123678-HxCDD	57653-85-7	0.114	JBQ	5.18	0.0503	1
11031	123789-HxCDD	19408-74-3	0.0645	JBQ	5.18	0.0452	1
11031	1234678-HpCDD	35822-46-9	0.526	JB	5.18	0.0719	1
11031	OCDD	3268-87-9	2.21	JB	10.4	0.0442	1
11031	2378-TCDF	51207-31-9	1.04	U	1.04	0.0460	1
11031	12378-PeCDF	57117-41-6	0.0572	JBQ	5.18	0.0215	1
11031	23478-PeCDF	57117-31-4	0.0346	JBQ	5.18	0.0217	1
11031	123478-HxCDF	70648-26-9	0.0618	JBQ	5.18	0.0383	1
11031	123678-HxCDF	57117-44-9	5.18	U	5.18	0.0347	1
11031	123789-HxCDF	72918-21-9	5.18	U	5.18	0.0400	1
11031	234678-HxCDF	60851-34-5	5.18	U	5.18	0.0342	1
11031	1234678-HpCDF	67562-39-4	0.192	JB	5.18	0.0466	1
11031	1234789-HpCDF	55673-89-7	0.444	JBQ	5.18	0.0702	1
11031	OCDF	39001-02-0	0.292	JBQ	10.4	0.0749	1
D/F Toxic Equivalents	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00775				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	75	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300108
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300108
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13BKG

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 06:14	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/05/2013 23:41	Laura M Krieger	25.1
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:28	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:29	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 20:52	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 10:54	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 02:36	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 05:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MS Soil
SSFL NBZ

LL Sample # SW 7300109
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	35		1.7	0.70	1
12969	Acenaphthylene	208-96-8	35		1.7	0.35	1
12969	Anthracene	120-12-7	35		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	39		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	38		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	39		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	35		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	39		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	40		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	39		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	36		19	6.3	1
12969	Chrysene	218-01-9	39		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.7	0.70	1
12969	Diethylphthalate	84-66-2	36		19	6.3	1
12969	Dimethylphthalate	131-11-3	37		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	41		19	6.3	1
12969	Fluoranthene	206-44-0	36		1.7	0.70	1
12969	Fluorene	86-73-7	36		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	39		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	39		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	40		1.7	0.70	1
12969	Naphthalene	91-20-3	36		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	35		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.3	1
12969	Phenanthrene	85-01-8	35		1.7	0.70	1
12969	Pyrene	129-00-0	41		1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.1	0.2	25.72
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.6		0.87	0.18	1
10590	Alpha BHC	319-84-6	3.9		0.87	0.18	1
10590	Beta BHC	319-85-7	3.8		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	4.1		0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	8.4		1.8	0.35	1
10590	p,p-DDE	72-55-9	8.0		1.8	0.35	1
10590	p,p-DDT	50-29-3	8.6		1.8	0.37	1
10590	Delta BHC	319-86-8	3.9		0.87	0.47	1
10590	Dieldrin	60-57-1	7.7		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.2		0.87	0.23	1
10590	Endosulfan II	33213-65-9	6.6		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	7.8		1.8	0.35	1
10590	Endrin	72-20-8	7.8		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	7.0		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	7.3		1.9	0.63	1
10590	Heptachlor	76-44-8	3.7		0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.7		0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MS Soil
SSFL NBZ

LL Sample # SW 7300109
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	41		7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	190		18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	200		18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. Since this sample is the matrix spike, the data is reported.

GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.4	J	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	6.8		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	12		10	4.2	1
12952	EFH (C8-C11)	n.a.	3.7	J	5.2	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MS Soil
SSFL NBZ

LL Sample # SW 7300109
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.0	B	1.03	0.0593	1
11031	12378-PeCDD	40321-76-4	101		5.15	0.0570	1
11031	123478-HxCDD	39227-28-6	103	B	5.15	0.0852	1
11031	123678-HxCDD	57653-85-7	105	B	5.15	0.0908	1
11031	123789-HxCDD	19408-74-3	102	B	5.15	0.0842	1
11031	1234678-HpCDD	35822-46-9	103	B	5.15	0.0894	1
11031	OCDD	3268-87-9	202	B	10.3	0.0557	1
11031	2378-TCDF	51207-31-9	20.6		1.03	0.0547	1
11031	12378-PeCDF	57117-41-6	101	B	5.15	0.0384	1
11031	23478-PeCDF	57117-31-4	103	B	5.15	0.0380	1
11031	123478-HxCDF	70648-26-9	103	B	5.15	0.0598	1
11031	123678-HxCDF	57117-44-9	106	B	5.15	0.0574	1
11031	123789-HxCDF	72918-21-9	104	B	5.15	0.0711	1
11031	234678-HxCDF	60851-34-5	106	B	5.15	0.0595	1
11031	1234678-HpCDF	67562-39-4	103	B	5.15	0.0580	1
11031	1234789-HpCDF	55673-89-7	107	B	5.15	0.0904	1
11031	OCDF	39001-02-0	202	B	10.3	0.0681	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	57	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MS Soil
SSFL NBZ

LL Sample # SW 7300109
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MS

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 06:47	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 00:18	Laura M Krieger	25.72
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:30	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:30	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 21:07	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 11:13	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 02:58	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 06:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MSD Soil
SSFL NBZ

LL Sample # SW 7300110
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	34		1.7	0.70	1
12969	Acenaphthylene	208-96-8	35		1.7	0.35	1
12969	Anthracene	120-12-7	35		1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	39		1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	37		1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	38		1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	35		18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	39		1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	40		1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	40		19	6.3	1
12969	Di-n-butylphthalate	84-74-2	36		19	6.3	1
12969	Chrysene	218-01-9	39		1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	37		1.7	0.70	1
12969	Diethylphthalate	84-66-2	36		19	6.3	1
12969	Dimethylphthalate	131-11-3	36		19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	39		19	6.3	1
12969	Fluoranthene	206-44-0	36		1.7	0.70	1
12969	Fluorene	86-73-7	35		1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	38		1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	39		1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	40		1.7	0.70	1
12969	Naphthalene	91-20-3	35		1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	35		1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	40		19	6.3	1
12969	Phenanthrene	85-01-8	34		1.7	0.70	1
12969	Pyrene	129-00-0	40		1.7	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	10		1.0	0.2	24.41
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	3.6		0.87	0.18	1
10590	Alpha BHC	319-84-6	4.0		0.87	0.18	1
10590	Beta BHC	319-85-7	3.8		2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	4.2		0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	8.5		1.8	0.35	1
10590	p,p-DDE	72-55-9	8.2		1.8	0.35	1
10590	p,p-DDT	50-29-3	8.7		1.8	0.37	1
10590	Delta BHC	319-86-8	4.0		0.87	0.47	1
10590	Dieldrin	60-57-1	7.9		1.8	0.35	1
10590	Endosulfan I	959-98-8	3.3		0.87	0.23	1
10590	Endosulfan II	33213-65-9	6.8		1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	7.8		1.8	0.35	1
10590	Endrin	72-20-8	7.9		1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	7.1		1.8	0.35	1
10590	Endrin Ketone	53494-70-5	7.3		1.9	0.63	1
10590	Heptachlor	76-44-8	3.7		0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	3.8		0.87	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MSD Soil
SSFL NBZ

LL Sample # SW 7300110
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	41		7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	170		18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	180		18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	4.4	J	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	6.9		5.2	2.1	1
12952	EFH (C21-C30)	n.a.	11		5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	J	10	4.2	1
12952	EFH (C8-C11)	n.a.	3.7	J	5.2	2.1	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.5		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MSD Soil
SSFL NBZ

LL Sample # SW 7300110
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.3	B	1.04	0.0806	1
11031	12378-PeCDD	40321-76-4	102		5.20	0.0561	1
11031	123478-HxCDD	39227-28-6	103	B	5.20	0.0598	1
11031	123678-HxCDD	57653-85-7	106	B	5.20	0.0649	1
11031	123789-HxCDD	19408-74-3	103	B	5.20	0.0597	1
11031	1234678-HpCDD	35822-46-9	104	B	5.20	0.0779	1
11031	OCDD	3268-87-9	207	B	10.4	0.0553	1
11031	2378-TCDF	51207-31-9	20.6		1.04	0.0664	1
11031	12378-PeCDF	57117-41-6	102	B	5.20	0.0359	1
11031	23478-PeCDF	57117-31-4	103	B	5.20	0.0333	1
11031	123478-HxCDF	70648-26-9	104	B	5.20	0.0427	1
11031	123678-HxCDF	57117-44-9	109	B	5.20	0.0400	1
11031	123789-HxCDF	72918-21-9	107	B	5.20	0.0454	1
11031	234678-HxCDF	60851-34-5	106	B	5.20	0.0405	1
11031	1234678-HpCDF	67562-39-4	105	B	5.20	0.0469	1
11031	1234789-HpCDF	55673-89-7	108	B	5.20	0.0658	1
11031	OCDF	39001-02-0	205	B	10.4	0.0489	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	53	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	81	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration
F Interference is present
S Saturation of detection signal

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5MSD Soil
SSFL NBZ

LL Sample # SW 7300110
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13MSD

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 07:19	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 00:56	Laura M Krieger	24.41
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:31	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:32	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 21:22	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 11:31	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 03:20	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 07:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-509-NBZ-SB-2.5-3.5DUP Soil
SSFL NBZ

LL Sample # SW 7300111
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

50925 SDG#: PH138-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 20 C.	n.a.	7.53	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	14a Moisture Content by 160.3	n.a.	4.5	0.10	0.10	1
11626	14a Moisture Content by 160.3 The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.	n.a.	4.4	0.10	0.10	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11625	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1
11626	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-809-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300112
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S0925 SDG#: PH138-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.70	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.35	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.70	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.70	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.70	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.70	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.88	U	0.88	0.18	1
10590	Alpha BHC	319-84-6	0.88	U	0.88	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.88	U	0.88	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.88	U	0.88	0.48	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.88	U	0.88	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.88	U	0.88	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-809-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300112
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S0925 SDG#: PH138-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.1	U	7.1	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	11	1
13099	Aroclor 5442	12642-23-8	35	U	35	11	1
13099	Aroclor 5460	11126-42-4	35	U	35	11	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.4	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.7	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C15-C20)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C21-C30)	n.a.	5.3	U	5.3	2.1	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.2	1
12952	EFH (C8-C11)	n.a.	5.3	U	5.3	2.1	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	7.65		0.0100	0.0100	1
	The pH was measured in water at 20 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	5.4		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-809-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300112
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S0925 SDG#: PH138-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.03	U	1.03	0.0508	1
11031	12378-PeCDD	40321-76-4	0.107	JQ	5.17	0.0340	1
11031	123478-HxCDD	39227-28-6	0.0335	JBQ	5.17	0.0248	1
11031	123678-HxCDD	57653-85-7	0.0613	JBQ	5.17	0.0260	1
11031	123789-HxCDD	19408-74-3	0.0623	JBQ	5.17	0.0242	1
11031	1234678-HpCDD	35822-46-9	0.235	JBQ	5.17	0.0319	1
11031	OCDD	3268-87-9	0.870	JBQ	10.3	0.0316	1
11031	2378-TCDF	51207-31-9	1.03	U	1.03	0.0393	1
11031	12378-PeCDF	57117-41-6	0.0539	JBQ	5.17	0.0190	1
11031	23478-PeCDF	57117-31-4	0.0469	JBQ	5.17	0.0186	1
11031	123478-HxCDF	70648-26-9	0.0616	JB	5.17	0.0223	1
11031	123678-HxCDF	57117-44-9	0.0491	JB	5.17	0.0205	1
11031	123789-HxCDF	72918-21-9	0.0762	JBQ	5.17	0.0240	1
11031	234678-HxCDF	60851-34-5	0.0373	JB	5.17	0.0205	1
11031	1234678-HpCDF	67562-39-4	0.0628	JBQ	5.17	0.0140	1
11031	1234789-HpCDF	55673-89-7	0.0419	JBQ	5.17	0.0195	1
11031	OCDF	39001-02-0	0.278	JBQ	10.3	0.0334	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0147				1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	88	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	74	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-809-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300112
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S0925 SDG#: PH138-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-809-NBZ-SB-2.5-3.5 Soil
SSFL NBZ

LL Sample # SW 7300112
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 13:40 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

S0925 SDG#: PH138-14

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 08:24	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 03:27	Laura M Krieger	25
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:33	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:33	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 21:38	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 11:50	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 03:41	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 11:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300113
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH138-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/kg		ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7	U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7	U	1.7	0.35	1
12969	Anthracene	120-12-7	1.7	U	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	1.7	U	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	1.7	U	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	1.7	U	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18	U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.7	U	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	1.7	U	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19	U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19	U	19	6.3	1
12969	Chrysene	218-01-9	1.7	U	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7	U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19	U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19	U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	6.3	1
12969	Fluoranthene	206-44-0	1.7	U	1.7	0.70	1
12969	Fluorene	86-73-7	1.7	U	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	U	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.7	U	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.7	U	1.7	0.70	1
12969	Naphthalene	91-20-3	1.7	U	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7	U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19	U	19	6.3	1
12969	Phenanthrene	85-01-8	1.7	U	1.7	0.70	1
12969	Pyrene	129-00-0	1.7	U	1.7	0.70	1
Pesticides/PCBs	**SW-846 8081B**		ug/kg		ug/kg	ug/kg	
10590	Aldrin	309-00-2	0.87	U	0.87	0.18	1
10590	Alpha BHC	319-84-6	0.87	U	0.87	0.18	1
10590	Beta BHC	319-85-7	2.0	U	2.0	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.87	U	0.87	0.18	1
10590	Chlordane	57-74-9	18	U	18	4.2	1
10590	p,p-DDD	72-54-8	1.8	U	1.8	0.35	1
10590	p,p-DDE	72-55-9	1.8	U	1.8	0.35	1
10590	p,p-DDT	50-29-3	1.8	U	1.8	0.37	1
10590	Delta BHC	319-86-8	0.87	U	0.87	0.47	1
10590	Dieldrin	60-57-1	1.8	U	1.8	0.35	1
10590	Endosulfan I	959-98-8	0.87	U	0.87	0.23	1
10590	Endosulfan II	33213-65-9	1.8	U	1.8	0.35	1
10590	Endosulfan Sulfate	1031-07-8	1.8	U	1.8	0.35	1
10590	Endrin	72-20-8	1.8	U	1.8	0.35	1
10590	Endrin Aldehyde	7421-93-4	1.8	U	1.8	0.35	1
10590	Endrin Ketone	53494-70-5	1.9	U	1.9	0.63	1
10590	Heptachlor	76-44-8	0.87	U	0.87	0.18	1
10590	Heptachlor Epoxide	1024-57-3	0.87	U	0.87	0.18	1
10590	Methoxychlor	72-43-5	7.0	U	7.0	1.8	1
10590	Mirex	2385-85-5	1.8	U	1.8	0.37	1
10590	Toxaphene	8001-35-2	35	U	35	15	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300113
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH138-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	35	U	35	10	1
13099	Aroclor 5442	12642-23-8	35	U	35	10	1
13099	Aroclor 5460	11126-42-4	35	U	35	10	1
13099	PCB-1016	12674-11-2	18	U	18	3.5	1
13099	PCB-1221	11104-28-2	18	U	18	5.3	1
13099	PCB-1232	11141-16-5	18	U	18	4.3	1
13099	PCB-1242	53469-21-9	18	U	18	4.3	1
13099	PCB-1248	12672-29-6	18	U	18	3.5	1
13099	PCB-1254	11097-69-1	18	U	18	4.6	1
13099	PCB-1260	11096-82-5	18	U	18	4.1	1
13099	PCB-1262	37324-23-5	18	U	18	3.5	1
13099	PCB-1268	11100-14-4	18	U	18	3.5	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	5.2	U	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	10	U	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2	U	5.2	2.1	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D The pH was measured in water at 19.9 C.	n.a.	7.93		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3 Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.	n.a.	4.6		0.10	0.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300113
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH138-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0636 JB	1.03	0.0589	1
11031	12378-PeCDD	40321-76-4	0.0784 JQ	5.17	0.0373	1
11031	123478-HxCDD	39227-28-6	5.17 U	5.17	0.0286	1
11031	123678-HxCDD	57653-85-7	0.0681 JBQ	5.17	0.0305	1
11031	123789-HxCDD	19408-74-3	0.0595 JBQ	5.17	0.0282	1
11031	1234678-HpCDD	35822-46-9	0.539 JBQ	5.17	0.0355	1
11031	OCDD	3268-87-9	3.04 JB	10.3	0.0301	1
11031	2378-TCDF	51207-31-9	0.0810 JQ	1.03	0.0393	1
11031	12378-PeCDF	57117-41-6	0.0446 JB	5.17	0.0199	1
11031	23478-PeCDF	57117-31-4	0.0316 JBQ	5.17	0.0192	1
11031	123478-HxCDF	70648-26-9	0.0756 JB	5.17	0.0198	1
11031	123678-HxCDF	57117-44-9	5.17 U	5.17	0.0183	1
11031	123789-HxCDF	72918-21-9	0.0883 JBQ	5.17	0.0230	1
11031	234678-HxCDF	60851-34-5	0.0301 JBQ	5.17	0.0192	1
11031	1234678-HpCDF	67562-39-4	0.110 JBQ	5.17	0.0128	1
11031	1234789-HpCDF	55673-89-7	0.0570 JBQ	5.17	0.0191	1
11031	OCDF	39001-02-0	0.280 JBQ	10.3	0.0360	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.0735			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	60	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	66	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300113
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH138-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-0.0-0.5 Soil
SSFL NBZ

LL Sample # SW 7300113
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:30 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51000 SDG#: PH138-15

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 08:56	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 21:53	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 12:08	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 04:03	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 12:29	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300114
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51045 SDG#: PH138-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
12969	Acenaphthene	83-32-9	1.8	U	1.8	0.73	1
12969	Acenaphthylene	208-96-8	1.8	U	1.8	0.36	1
12969	Anthracene	120-12-7	1.8	U	1.8	0.36	1
12969	Benzo(a)anthracene	56-55-3	1.8	U	1.8	0.73	1
12969	Benzo(a)pyrene	50-32-8	1.8	U	1.8	0.73	1
12969	Benzo(b)fluoranthene	205-99-2	1.8	U	1.8	0.73	1
12969	Benzo(e)pyrene	192-97-2	19	U	19	3.6	1
12969	Benzo(g,h,i)perylene	191-24-2	1.8	U	1.8	0.73	1
12969	Benzo(k)fluoranthene	207-08-9	1.8	U	1.8	0.73	1
12969	Butylbenzylphthalate	85-68-7	20	U	20	6.5	1
12969	Di-n-butylphthalate	84-74-2	20	U	20	6.5	1
12969	Chrysene	218-01-9	1.8	U	1.8	0.36	1
12969	Dibenz(a,h)anthracene	53-70-3	1.8	U	1.8	0.73	1
12969	Diethylphthalate	84-66-2	20	U	20	6.5	1
12969	Dimethylphthalate	131-11-3	20	U	20	6.5	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	6.5	1
12969	Fluoranthene	206-44-0	1.8	U	1.8	0.73	1
12969	Fluorene	86-73-7	1.8	U	1.8	0.73	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	U	1.8	0.73	1
12969	1-Methylnaphthalene	90-12-0	1.8	U	1.8	0.73	1
12969	2-Methylnaphthalene	91-57-6	1.8	U	1.8	0.73	1
12969	Naphthalene	91-20-3	1.8	U	1.8	0.73	1
12969	N-Nitrosodimethylamine	62-75-9	1.8	U	1.8	0.73	1
12969	Di-n-octylphthalate	117-84-0	20	U	20	6.5	1
12969	Phenanthrene	85-01-8	1.8	U	1.8	0.73	1
12969	Pyrene	129-00-0	1.8	U	1.8	0.73	1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	
05551	11a TPH by EPA 8015B GRO	n.a.	1.1	U	1.1	0.2	25.35
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Aldrin	309-00-2	0.91	U	0.91	0.19	1
10590	Alpha BHC	319-84-6	0.91	U	0.91	0.19	1
10590	Beta BHC	319-85-7	2.1	U	2.1	1.0	1
10590	Gamma BHC - Lindane	58-89-9	0.91	U	0.91	0.19	1
10590	Chlordane	57-74-9	19	U	19	4.4	1
10590	p,p-DDD	72-54-8	1.9	U	1.9	0.36	1
10590	p,p-DDE	72-55-9	1.9	U	1.9	0.36	1
10590	p,p-DDT	50-29-3	1.9	U	1.9	0.38	1
10590	Delta BHC	319-86-8	0.91	U	0.91	0.49	1
10590	Dieldrin	60-57-1	1.9	U	1.9	0.36	1
10590	Endosulfan I	959-98-8	0.91	U	0.91	0.24	1
10590	Endosulfan II	33213-65-9	1.9	U	1.9	0.36	1
10590	Endosulfan Sulfate	1031-07-8	1.9	U	1.9	0.36	1
10590	Endrin	72-20-8	1.9	U	1.9	0.36	1
10590	Endrin Aldehyde	7421-93-4	1.9	U	1.9	0.36	1
10590	Endrin Ketone	53494-70-5	2.0	U	2.0	0.65	1
10590	Heptachlor	76-44-8	0.91	U	0.91	0.19	1
10590	Heptachlor Epoxide	1024-57-3	0.91	U	0.91	0.19	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300114
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51045 SDG#: PH138-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081B**		**ug/kg**		**ug/kg**	**ug/kg**	
10590	Methoxychlor	72-43-5	7.3	U	7.3	1.9	1
10590	Mirex	2385-85-5	1.9	U	1.9	0.38	1
10590	Toxaphene	8001-35-2	36	U	36	15	1
Pesticides/PCBs	**SW-846 8082A**		**ug/kg**		**ug/kg**	**ug/kg**	
13099	Aroclor 5432	63496-31-1	36	U	36	11	1
13099	Aroclor 5442	12642-23-8	36	U	36	11	1
13099	Aroclor 5460	11126-42-4	36	U	36	11	1
13099	PCB-1016	12674-11-2	19	U	19	3.6	1
13099	PCB-1221	11104-28-2	19	U	19	5.6	1
13099	PCB-1232	11141-16-5	19	U	19	4.5	1
13099	PCB-1242	53469-21-9	19	U	19	4.5	1
13099	PCB-1248	12672-29-6	19	U	19	3.6	1
13099	PCB-1254	11097-69-1	19	U	19	4.8	1
13099	PCB-1260	11096-82-5	19	U	19	4.3	1
13099	PCB-1262	37324-23-5	19	U	19	3.6	1
13099	PCB-1268	11100-14-4	19	U	19	3.6	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	
12952	EFH (C12-C14)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C15-C20)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C21-C30)	n.a.	5.5	U	5.5	2.2	1
12952	EFH (C30-C40)	n.a.	11	U	11	4.4	1
12952	EFH (C8-C11)	n.a.	5.5	U	5.5	2.2	1
Wet Chemistry	**SW-846 9045D modified**		**Std. Units**		**Std. Units**	**Std. Units**	
00394	15a pH by 9045D	n.a.	8.04		0.0100	0.0100	1
	The pH was measured in water at 20.4 C.						
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	14a Moisture Content by 160.3	n.a.	8.3		0.10	0.10	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300114
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51045 SDG#: PH138-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	1.06 U	1.06	0.0605	1
11031	12378-PeCDD	40321-76-4	5.31 U	5.31	0.0395	1
11031	123478-HxCDD	39227-28-6	0.0542 JBQ	5.31	0.0317	1
11031	123678-HxCDD	57653-85-7	0.0635 JBQ	5.31	0.0356	1
11031	123789-HxCDD	19408-74-3	5.31 U	5.31	0.0294	1
11031	1234678-HpCDD	35822-46-9	0.283 JB	5.31	0.0327	1
11031	OCDD	3268-87-9	1.28 JB	10.6	0.0333	1
11031	2378-TCDF	51207-31-9	1.06 U	1.06	0.0419	1
11031	12378-PeCDF	57117-41-6	0.0805 JBQ	5.31	0.0229	1
11031	23478-PeCDF	57117-31-4	0.0357 JBQ	5.31	0.0214	1
11031	123478-HxCDF	70648-26-9	0.0598 JBQ	5.31	0.0249	1
11031	123678-HxCDF	57117-44-9	5.31 U	5.31	0.0226	1
11031	123789-HxCDF	72918-21-9	0.0810 JBQ	5.31	0.0280	1
11031	234678-HxCDF	60851-34-5	0.0507 JB	5.31	0.0237	1
11031	1234678-HpCDF	67562-39-4	0.0670 JBQ	5.31	0.0123	1
11031	1234789-HpCDF	55673-89-7	0.0591 JB	5.31	0.0176	1
11031	OCDF	39001-02-0	0.242 JBQ	10.6	0.0413	1
D/F Toxic Equivalents	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	TEQ WHO 2005 - EDLx0.0	n.a.	0.00883			1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	56	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	54	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	65	17 - 157

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300114
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51045 SDG#: PH138-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry MRL*	Dry EDL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Sample Description: SL-510-NBZ-SB-4.0-5.0 Soil
SSFL NBZ

LL Sample # SW 7300114
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 14:45 by KL

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

51045 SDG#: PH138-16

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12969	7a SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13344SLD026	12/27/2013 09:28	Mark A Clark	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	13344SLD026	12/10/2013 17:45	Nicholas W Shroyer	1
05551	11a TPH by EPA 8015B GRO	TPH GRO SW-846 8015B mod	1	13339A16A	12/06/2013 04:05	Laura M Krieger	25.35
06130	GC - 5 g HL Encore Prep	SW-846 5035A	1	201333833331	12/04/2013 14:34	Mitchell R Washel	n.a.
06130	GC - 5 g HL Encore Prep	SW-846 5035A	2	201333833331	12/04/2013 14:34	Mitchell R Washel	n.a.
10590	20a Pesticides by EPA 8081B	SW-846 8081B	1	133470015A	12/16/2013 22:08	Jamie L Brillhart	1
13099	19a PCBs and PCTs 8082A	SW-846 8082A	1	133440006A	12/11/2013 12:27	Monica M Souders	1
13100	PCB/PCT Solids Update IV Ext.	SW-846 3546	1	133440006A	12/10/2013 16:00	JoElla L Rice	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	133470015A	12/13/2013 17:50	Sally L Appleyard	1
12952	10a TPH by EPA 8015B (DRO)	SW-846 8015B modified	1	133440025A	12/12/2013 04:25	Heather E Williams	1
12959	EFH soil ext.(microwave)	SW-846 3546	1	133440025A	12/11/2013 08:30	Olivia Arosemena	1
11031	23a Dioxin/Furan by EPA 1613B	EPA 1613B	1	13346001	12/14/2013 13:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	13346001	12/12/2013 10:30	Chin F Ly	1
00394	15a pH by 9045D	SW-846 9045D modified	1	13338039402A	12/04/2013 11:00	Carolyn M Mastropietro	1
11624	14a Moisture Content by 160.3	EPA 160.3 modified	1	13345162401B	12/11/2013 22:37	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: EB-120313 Water
SSFL NBZ

LL Sample # WW 7300115
LL Group # 1438204
Account # 13013

Project Name: SSFL Phase 3 Sampling

Collected: 12/03/2013 15:00 by PH

Submitted: 12/04/2013 09:35
Reported: 12/30/2013 09:52

CDM Federal Programs Corp.
3201 Jermantown Road
Suite 400
Fairfax VA 22030

EB138 SDG#: PH138-17EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Limit of Quantitation*	As Received Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D SIM**		ug/l		ug/l	ug/l	
12971	Acenaphthene	83-32-9	0.050	U	0.050	0.010	1
12971	Acenaphthylene	208-96-8	0.050	U	0.050	0.010	1
12971	Anthracene	120-12-7	0.050	U	0.050	0.010	1
12971	Benzo(a)anthracene	56-55-3	0.050	U	0.050	0.010	1
12971	Benzo(a)pyrene	50-32-8	0.050	U	0.050	0.010	1
12971	Benzo(b)fluoranthene	205-99-2	0.012	J	0.050	0.010	1
12971	Benzo(e)pyrene	192-97-2	0.050	U	0.050	0.010	1
12971	Benzo(g,h,i)perylene	191-24-2	0.059		0.050	0.010	1
12971	Benzo(k)fluoranthene	207-08-9	0.011	J	0.050	0.010	1
12971	Butylbenzylphthalate	85-68-7	1.0	U	1.0	0.050	1
12971	Di-n-butylphthalate	84-74-2	0.18	J	1.0	0.050	1
12971	Chrysene	218-01-9	0.050	U	0.050	0.010	1
12971	Dibenz(a,h)anthracene	53-70-3	0.059		0.050	0.010	1
12971	Diethylphthalate	84-66-2	0.49	J	1.0	0.050	1
12971	Dimethylphthalate	131-11-3	1.0	U	1.0	0.050	1
12971	Bis(2-Ethylhexyl)phthalate	117-81-7	0.13	J	1.0	0.050	1
12971	Fluoranthene	206-44-0	0.050	U	0.050	0.010	1
12971	Fluorene	86-73-7	0.050	U	0.050	0.010	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.054		0.050	0.010	1
12971	1-Methylnaphthalene	90-12-0	0.050	U	0.050	0.010	1
12971	2-Methylnaphthalene	91-57-6	0.050	U	0.050	0.010	1
12971	Naphthalene	91-20-3	0.050	U	0.050	0.030	1
12971	N-Nitrosodimethylamine	62-75-9	0.050	U	0.050	0.010	1
12971	Di-n-octylphthalate	117-84-0	1.0	U	1.0	0.050	1
12971	Phenanthrene	85-01-8	0.050	U	0.050	0.030	1
12971	Pyrene	129-00-0	0.050	U	0.050	0.010	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. Since the result is within the acceptance range allowed by the method, the data is reported.

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12971	7b SVOC SIM EPA 8270D	SW-846 8270D SIM	1	13340WAI026	12/10/2013 17:03	Chad A Moline	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	13340WAI026	12/08/2013 07:30	Nicholas W Shroyer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13340WAI026	Sample number(s): 7300115									
Acenaphthene	0.050	U	0.050	0.010	ug/l	107	107	77-118	1	30
Acenaphthylene	0.050	U	0.050	0.010	ug/l	113	114	80-123	1	30
Anthracene	0.050	U	0.050	0.010	ug/l	108	108	78-123	0	30
Benzo(a)anthracene	0.050	U	0.050	0.010	ug/l	115	111	73-127	3	30
Benzo(a)pyrene	0.050	U	0.050	0.010	ug/l	104	106	72-120	2	30
Benzo(b)fluoranthene	0.050	U	0.050	0.010	ug/l	118	117	79-136	1	30
Benzo(e)pyrene	0.050	U	0.050	0.010	ug/l	102	101	70-130	2	30
Benzo(g,h,i)perylene	0.050	U	0.050	0.010	ug/l	112	106	64-130	6	30
Benzo(k)fluoranthene	0.050	U	0.050	0.010	ug/l	105	107	73-131	3	30
Butylbenzylphthalate	1.0	U	1.0	0.050	ug/l	106	110	40-138	4	30
Di-n-butylphthalate	1.0	U	1.0	0.050	ug/l	113	115	64-141	2	30
Chrysene	0.050	U	0.050	0.010	ug/l	96	105	76-125	9	30
Dibenz(a,h)anthracene	0.050	U	0.050	0.010	ug/l	107	108	58-131	1	30
Diethylphthalate	1.0	U	1.0	0.050	ug/l	113	114	64-128	1	30
Dimethylphthalate	1.0	U	1.0	0.050	ug/l	108	112	23-139	4	30
Bis(2-Ethylhexyl)phthalate	0.079	J	1.0	0.050	ug/l	238*	110	70-143	74*	30
Fluoranthene	0.050	U	0.050	0.010	ug/l	104	104	79-124	1	30
Fluorene	0.050	U	0.050	0.010	ug/l	105	106	74-115	1	30
Indeno(1,2,3-cd)pyrene	0.050	U	0.050	0.010	ug/l	110	106	62-130	4	30
1-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	108	108	80-126	0	30
2-Methylnaphthalene	0.050	U	0.050	0.010	ug/l	106	107	81-124	1	30
Naphthalene	0.050	U	0.050	0.030	ug/l	106	106	75-120	0	30
N-Nitrosodimethylamine	0.050	U	0.050	0.010	ug/l	66	67	36-120	1	30
Di-n-octylphthalate	1.0	U	1.0	0.050	ug/l	87	96	57-145	10	30
Phenanthrene	0.050	U	0.050	0.030	ug/l	102	104	75-120	2	30
Pyrene	0.050	U	0.050	0.010	ug/l	110	109	71-130	1	30
Batch number: 13344SLD026	Sample number(s): 7300107-7300110,7300112-7300114									
Acenaphthene	1.7	U	1.7	0.67	ug/kg	96		77-116		
Acenaphthylene	1.7	U	1.7	0.33	ug/kg	99		78-120		
Anthracene	1.7	U	1.7	0.33	ug/kg	100		80-116		
Benzo(a)anthracene	1.7	U	1.7	0.67	ug/kg	112		83-119		
Benzo(a)pyrene	1.7	U	1.7	0.67	ug/kg	107		80-122		
Benzo(b)fluoranthene	1.7	U	1.7	0.67	ug/kg	124		82-135		
Benzo(e)pyrene	17	U	17.	3.3	ug/kg	99		81-110		
Benzo(g,h,i)perylene	1.7	U	1.7	0.67	ug/kg	108		79-121		
Benzo(k)fluoranthene	1.7	U	1.7	0.67	ug/kg	101		79-123		
Butylbenzylphthalate	18	U	18.	6.0	ug/kg	112		77-123		
Di-n-butylphthalate	18	U	18.	6.0	ug/kg	101		78-125		
Chrysene	1.7	U	1.7	0.33	ug/kg	111		84-113		
Dibenz(a,h)anthracene	1.7	U	1.7	0.67	ug/kg	102		78-124		
Diethylphthalate	18	U	18.	6.0	ug/kg	102		77-130		
Dimethylphthalate	18	U	18.	6.0	ug/kg	104		85-122		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bis(2-Ethylhexyl)phthalate	18	U	18.	6.0	ug/kg	111		79-121		
Fluoranthene	1.7	U	1.7	0.67	ug/kg	102		85-116		
Fluorene	1.7	U	1.7	0.67	ug/kg	102		81-126		
Indeno(1,2,3-cd)pyrene	1.7	U	1.7	0.67	ug/kg	107		77-124		
1-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	111		78-119		
2-Methylnaphthalene	1.7	U	1.7	0.67	ug/kg	112		78-121		
Naphthalene	1.7	U	1.7	0.67	ug/kg	101		79-113		
N-Nitrosodimethylamine	1.7	U	1.7	0.67	ug/kg	100		71-124		
Di-n-octylphthalate	18	U	18.	6.0	ug/kg	114		76-131		
Phenanthrene	1.7	U	1.7	0.67	ug/kg	97		72-110		
Pyrene	1.7	U	1.7	0.67	ug/kg	115*		79-112		
Batch number: 13339A16A	Sample number(s): 7300095,7300097,7300108-7300110,7300112,7300114									
11a TPH by EPA 8015B GRO	1.0	U	1.0	0.2	mg/kg	99		67-119		
Batch number: 13339A94A	Sample number(s): 7300106									
TPH-GRO S.CA water C5-C12	50	U	50.	20	ug/l	113	114	75-135	1	30
Batch number: 133450034A	Sample number(s): 7300105									
2,4-D	36	U	36.	12	ug/kg	136*		59-122		
Dalapon	90	U	90.	44	ug/kg	71		25-100		
2,4-DB	17	U	17.	6.2	ug/kg	135*		54-131		
Dicamba	12	U	12.	4.0	ug/kg	102		55-138		
Dinoseb	24	U	24.	9.0	ug/kg	13		10-56		
2,4-DP (Dichlorprop)	17	U	17.	9.0	ug/kg	153		65-158		
MCPA	2,500	U	2,500.	760	ug/kg	97		56-133		
MCPP (Mecoprop)	2,500	U	2,500.	750	ug/kg	96		54-134		
2,4,5-T	1.7	U	1.7	0.82	ug/kg	112		58-135		
2,4,5-TP	1.7	U	1.7	0.75	ug/kg	125		63-130		
Batch number: 133440006A	Sample number(s): 7300107-7300110,7300112-7300114									
Aroclor 5432	33	U	33.	10	ug/kg					
Aroclor 5442	33	U	33.	10	ug/kg	86	90	36-106	4	30
Aroclor 5460	33	U	33.	10	ug/kg					
PCB-1016	17	U	17.	3.3	ug/kg	106		82-116		
PCB-1221	17	U	17.	5.1	ug/kg					
PCB-1232	17	U	17.	4.1	ug/kg					
PCB-1242	17	U	17.	4.1	ug/kg					
PCB-1248	17	U	17.	3.3	ug/kg					
PCB-1254	17	U	17.	4.4	ug/kg					
PCB-1260	17	U	17.	3.9	ug/kg	115		84-125		
PCB-1262	17	U	17.	3.3	ug/kg					
PCB-1268	17	U	17.	3.3	ug/kg					
Batch number: 133440020A	Sample number(s): 7300094-7300104									
Aldrin	0.83	U	0.83	0.17	ug/kg	107		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	109		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	108		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	117		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	106		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	107		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	118		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	116		51-141		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dieldrin	1.7	U	1.7	0.33	ug/kg	110		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	93		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	101		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	115		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	106		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	99		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	108		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	103		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	111		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	111		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 133470015A	Sample number(s): 7300107-7300110,7300112-7300114									
Aldrin	0.83	U	0.83	0.17	ug/kg	103		60-118		
Alpha BHC	0.83	U	0.83	0.17	ug/kg	109		62-128		
Beta BHC	1.9	U	1.9	0.96	ug/kg	107		69-121		
Gamma BHC - Lindane	0.83	U	0.83	0.17	ug/kg	114		64-130		
Chlordane	17	U	17.	4.0	ug/kg					
p,p-DDD	1.7	U	1.7	0.33	ug/kg	109		69-141		
p,p-DDE	1.7	U	1.7	0.33	ug/kg	115		69-130		
p,p-DDT	1.7	U	1.7	0.35	ug/kg	114		64-139		
Delta BHC	0.83	U	0.83	0.45	ug/kg	110		51-141		
Dieldrin	1.7	U	1.7	0.33	ug/kg	103		73-135		
Endosulfan I	0.83	U	0.83	0.22	ug/kg	87		64-130		
Endosulfan II	1.7	U	1.7	0.33	ug/kg	93		68-128		
Endosulfan Sulfate	1.7	U	1.7	0.33	ug/kg	109		71-132		
Endrin	1.7	U	1.7	0.33	ug/kg	101		70-132		
Endrin Aldehyde	1.7	U	1.7	0.33	ug/kg	97		60-120		
Endrin Ketone	1.8	U	1.8	0.60	ug/kg	103		74-127		
Heptachlor	0.83	U	0.83	0.17	ug/kg	101		62-127		
Heptachlor Epoxide	0.83	U	0.83	0.17	ug/kg	105		69-125		
Methoxychlor	6.7	U	6.7	1.7	ug/kg	107		67-136		
Mirex	1.7	U	1.7	0.35	ug/kg					
Toxaphene	33	U	33.	14	ug/kg					
Batch number: 133440024A	Sample number(s): 7300094-7300105,7300107									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	105		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	111		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	108		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	69		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	90		60-115		
Batch number: 133440025A	Sample number(s): 7300108-7300110,7300112-7300114									
EFH (C12-C14)	5.0	U	5.0	2.0	mg/kg	91		76-115		
EFH (C15-C20)	5.0	U	5.0	2.0	mg/kg	94		78-127		
EFH (C21-C30)	5.0	U	5.0	2.0	mg/kg	94		77-127		
EFH (C30-C40)	10	U	10.	4.0	mg/kg	81		44-134		
EFH (C8-C11)	5.0	U	5.0	2.0	mg/kg	75		60-115		
Batch number: 13338039402A	Sample number(s): 7300107-7300108,7300111-7300114									
15a pH by 9045D						100		95-105		
Batch number: 13345162401A	Sample number(s): 7300094-7300105,7300107									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Analysis Name	Blank Result		Blank LOQ**	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
14a Moisture Content by 160.3						100		80-120		
Batch number: 13345162401B	Sample number(s): 7300108-7300114									
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		
14a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank MRL**	Blank EDL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 13346001	Sample number(s): 7300107-7300110,7300112-7300114									
2378-TCDD	0.116	J	1.00	0.0782	ng/kg	100		67-158		
12378-PeCDD	5.00	U	5.00	0.0439	ng/kg	100		70-142		
123478-HxCDD	0.0405	J	5.00	0.0347	ng/kg	101		70-164		
123678-HxCDD	0.0758	J	5.00	0.0380	ng/kg	102		76-134		
123789-HxCDD	0.0456	J	5.00	0.0353	ng/kg	101		64-162		
1234678-HpCDD	0.296	J	5.00	0.0599	ng/kg	101		70-140		
OCDD	0.976	J	10.0	0.0361	ng/kg	99		78-144		
2378-TCDF	1.00	U	1.00	0.0579	ng/kg	99		75-158		
12378-PeCDF	0.0841	J	5.00	0.0240	ng/kg	102		80-134		
23478-PeCDF	0.0874	J	5.00	0.0248	ng/kg	101		68-160		
123478-HxCDF	0.0878	J	5.00	0.0326	ng/kg	103		72-134		
123678-HxCDF	0.0448	J	5.00	0.0295	ng/kg	104		84-130		
123789-HxCDF	0.0998	J	5.00	0.0343	ng/kg	103		78-130		
234678-HxCDF	0.0919	J	5.00	0.0296	ng/kg	103		70-156		
1234678-HpCDF	0.121	J	5.00	0.0235	ng/kg	101		82-122		
1234789-HpCDF	0.413	J	5.00	0.0369	ng/kg	105		78-138		
OCDF	0.225	J	10.0	0.0449	ng/kg	100		63-170		
TEQ WHO 2005 - EDLx0.0	0.0408				ng/kg					

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 13344SLD026	Sample number(s): 7300107-7300110,7300112-7300114 UNSPK: 7300108								
Acenaphthene	99	96	48-127	3	30				
Acenaphthylene	101	99	49-121	2	30				
Anthracene	101	100	52-126	1	30				
Benzo(a)anthracene	113	111	44-143	1	30				
Benzo(a)pyrene	108	107	44-140	1	30				
Benzo(b)fluoranthene	112	110	26-142	2	30				
Benzo(e)pyrene	101	100	70-130	1	30				
Benzo(g,h,i)perylene	111	110	33-141	1	30				
Benzo(k)fluoranthene	114	115	54-142	1	30				
Butylbenzylphthalate	113	114	49-151	1	30				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Di-n-butylphthalate	103	102	52-147	1	30				
Chrysene	111	110	29-148	1	30				
Dibenz(a,h)anthracene	106	105	20-137	1	30				
Diethylphthalate	104	104	43-145	1	30				
Dimethylphthalate	107	104	58-129	2	30				
Bis(2-Ethylhexyl)phthalate	117	113	39-167	3	30				
Fluoranthene	104	102	40-148	2	30				
Fluorene	103	101	51-137	2	30				
Indeno(1,2,3-cd)pyrene	111	110	17-136	1	30				
1-Methylnaphthalene	113	111	50-131	2	30				
2-Methylnaphthalene	116	114	35-152	1	30				
Naphthalene	102	101	31-148	1	30				
N-Nitrosodimethylamine	100	101	48-113	1	30				
Di-n-octylphthalate	115	116	52-162	1	30				
Phenanthrene	101	99	29-142	2	30				
Pyrene	117	115	26-143	2	30				
Batch number: 13339A16A	Sample number(s): 7300095,7300097,7300108-7300110,7300112,7300114 UNSPK: 7300108								
11a TPH by EPA 8015B GRO	85	92	69-123	3	30				
Batch number: 133450034A	Sample number(s): 7300105 UNSPK: P306302								
2,4-D	142	151*	42-143	6	35				
Dalapon	62	57	16-98	8	50				
2,4-DB	144	152	10-179	5	50				
Dicamba	106	115	55-133	8	50				
Dinoseb	25	28	10-52	12	35				
2,4-DP (Dichlorprop)	154	161	32-171	4	50				
MCPA	101	110	23-169	9	50				
MCPP (Mecoprop)	95	97	24-164	2	50				
2,4,5-T	124	177*	12-172	35	35				
2,4,5-TP	128	131	10-142	2	35				
Batch number: 133440006A	Sample number(s): 7300107-7300110,7300112-7300114 UNSPK: 7300108								
PCB-1016	107	98	41-135	9	50				
PCB-1260	113	106	40-134	7	50				
Batch number: 133440020A	Sample number(s): 7300094-7300104 UNSPK: 7300098								
Aldrin	96	99	16-126	3	50				
Alpha BHC	102	103	14-140	1	50				
Beta BHC	97	102	42-133	5	50				
Gamma BHC - Lindane	102	108	30-137	5	50				
p,p-DDD	99	105	43-149	5	50				
p,p-DDE	111	119	35-152	7	50				
p,p-DDT	136	148	12-193	8	50				
Delta BHC	105	112	13-153	6	50				
Dieldrin	101	103	41-153	1	50				
Endosulfan I	83	86	26-146	4	50				
Endosulfan II	102	109	34-141	6	50				
Endosulfan Sulfate	102	106	10-181	3	50				
Endrin	101	104	30-152	3	50				
Endrin Aldehyde	86	91	23-138	6	50				
Endrin Ketone	93	98	30-148	4	50				

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
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Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Heptachlor	92	95	16-152	3	50				
Heptachlor Epoxide	110	114	33-144	3	50				
Methoxychlor	98	104	41-161	5	50				
Batch number: 133470015A	Sample number(s): 7300107-7300110,7300112-7300114 UNSPK: 7300108								
Aldrin	104	103	16-126	1	50				
Alpha BHC	108	111	14-140	3	50				
Beta BHC	106	107	42-133	1	50				
Gamma BHC - Lindane	114	117	30-137	2	50				
p,p-DDD	111	112	43-149	1	50				
p,p-DDE	114	116	35-152	2	50				
p,p-DDT	115	116	12-193	1	50				
Delta BHC	110	112	13-153	1	50				
Dieldrin	104	106	41-153	2	50				
Endosulfan I	88	90	26-146	1	50				
Endosulfan II	94	96	34-141	3	50				
Endosulfan Sulfate	111	111	10-181	0	50				
Endrin	102	104	30-152	2	50				
Endrin Aldehyde	96	98	23-138	2	50				
Endrin Ketone	103	103	30-148	0	50				
Heptachlor	101	101	16-152	0	50				
Heptachlor Epoxide	103	107	33-144	4	50				
Methoxychlor	108	109	41-161	1	50				
Batch number: 133440024A	Sample number(s): 7300094-7300105,7300107 UNSPK: 7300098								
EFH (C12-C14)	104	106	49-123	2	20				
EFH (C15-C20)	155*	115	49-123	30*	20				
EFH (C21-C30)	343*	111	49-123	102*	20				
EFH (C30-C40)	559*	103	49-123	138*	20				
EFH (C8-C11)	86	89	49-123	4	20				
Batch number: 133440025A	Sample number(s): 7300108-7300110,7300112-7300114 UNSPK: 7300108								
EFH (C12-C14)	83	84	49-123	1	20				
EFH (C15-C20)	87	88	49-123	1	20				
EFH (C21-C30)	87	88	49-123	1	20				
EFH (C30-C40)	75	67	49-123	12	20				
EFH (C8-C11)	70	70	49-123	0	20				
Batch number: 13338039402A	Sample number(s): 7300107-7300108,7300111-7300114 BKG: 7300108								
15a pH by 9045D						7.60	7.53	1	3
Batch number: 13345162401A	Sample number(s): 7300094-7300105,7300107 BKG: 7300098								
14a Moisture Content by 160.3						2.2	2.2	3	20
14a Moisture Content by 160.3						2.2	2.2	3	20
14a Moisture Content by 160.3						2.2	2.2	3	20
Batch number: 13345162401B	Sample number(s): 7300108-7300114 BKG: 7300108								
14a Moisture Content by 160.3						4.5	4.4	2	20
14a Moisture Content by 160.3						4.5	4.4	2	20
14a Moisture Content by 160.3						4.5	4.4	2	20
Batch number: 13346001	Sample number(s): 7300107-7300110,7300112-7300114 UNSPK: 7300108								

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Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	97	98	40-135	2	20				
12378-PeCDD	98	98	40-135	2	20				
123478-HxCDD	100	99	40-135	0	20				
123678-HxCDD	102	102	40-135	1	20				
123789-HxCDD	99	99	40-135	1	20				
1234678-HpCDD	100	100	40-135	1	20				
OCDD	97	98	40-135	2	20				
2378-TCDF	100	99	40-135	0	20				
12378-PeCDF	98	98	40-135	1	20				
23478-PeCDF	100	99	40-135	0	20				
123478-HxCDF	100	100	40-135	1	20				
123678-HxCDF	102	104	40-135	3	20				
123789-HxCDF	101	102	40-135	2	20				
234678-HxCDF	102	102	40-135	0	20				
1234678-HpCDF	100	101	40-135	2	20				
1234789-HpCDF	103	104	40-135	1	20				
OCDF	98	98	40-135	2	20				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 7b SVOC SIM EPA 8270D
Batch number: 13340WAI026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7300115	98	98	101
Blank	102	109	103
LCS	102	111	108
LCSD	101	108	106
Limits:	44-137	62-141	51-136

Analysis Name: 7a SVOC SIM EPA 8270D
Batch number: 13344SLD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7300107	86	87	105
7300108	79	81	98
7300109	85	86	105
7300110	85	87	104
7300112	87	88	107
7300113	82	83	102
7300114	77	78	95
Blank	87	90	107

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Surrogate Quality Control

LCS	83	85	103
MS	85	86	105
MSD	85	87	104
Limits:	54-129	59-125	61-125

Analysis Name: 11a TPH by EPA 8015B GRO
Batch number: 13339A16A

	Trifluorotoluene-F
7300095	96
7300097	82
7300108	96
7300109	87
7300110	77
7300112	88
7300114	87
Blank	100
LCS	110
MS	87
MSD	77
Limits:	50-142

Analysis Name: 11b TPH by EPA 8015B GRO
Batch number: 13339A94A

	Trifluorotoluene-F
7300106	87
Blank	87
LCS	92
LCSD	92
Limits:	63-135

Analysis Name: 19a PCBs and PCTs 8082A
Batch number: 133440006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7300107	109	106
7300108	101	98
7300109	121*	114
7300110	107	113
7300112	109	105
7300113	88	87
7300114	95	91
Blank	121*	117
LCS	117	117
LCSD	116	115
MS	121*	114
MSD	107	113
Limits:	45-120	45-120

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133440020A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Surrogate Quality Control

	Tetrachloro-m-xylene	Decachlorobiphenyl
7300094	91	96
7300095	102	106
7300096	94	105
7300097	99	109
7300098	104	117
7300099	89	104
7300100	96	112
7300101	105	115
7300102	94	104
7300103	90	103
7300104	89	107
Blank	101	112
LCS	105	118
MS	89	104
MSD	96	112
Limits:	50-130	20-120

Analysis Name: 21a Herbicides by EPA 8151A
Batch number: 133450034A

	2,4-Dichlorophenylacetic acid
7300105	89
Blank	82
LCS	98
MS	99
MSD	105
Limits:	50-150

Analysis Name: 20a Pesticides by EPA 8081B
Batch number: 133470015A

	Tetrachloro-m-xylene	Decachlorobiphenyl
7300107	95	107
7300108	96	109
7300109	101	115
7300110	107	116
7300112	100	111
7300113	89	102
7300114	92	106
Blank	100	111
LCS	109	120
MS	101	115
MSD	107	116
Limits:	50-130	20-120

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133440024A

	Chlorobenzene	Orthoterphenyl
7300094	94	96

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Surrogate Quality Control

7300095	89	87
7300096	93	94
7300097	105	105
7300098	96	97
7300099	99	75
7300100	103	97
7300101	92	94
7300102	94	96
7300103	90	91
7300104	97	97
7300105	96	97
7300107	99	99
Blank	100	95
LCS	103	98
MS	99	75
MSD	103	97
Limits:	37-125	66-123

Analysis Name: 10a TPH by EPA 8015B (DRO)
Batch number: 133440025A

	Chlorobenzene	Orthoterphenyl
7300108	87	86
7300109	82	82
7300110	82	82
7300112	84	82
7300113	76	77
7300114	79	78
Blank	83	82
LCS	88	88
MS	82	82
MSD	82	82
Limits:	37-125	66-123

Analysis Name: 23a Dioxin/Furan by EPA 1613B
Batch number: 13346001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
7300107	62	62	65	72	70	67
7300108	63	63	71	76	72	68
7300109	60	57	67	71	67	64
7300110	60	65	71	74	73	72
7300112	72	70	77	81	78	74
7300113	62	60	68	72	70	66
7300114	58	54	63	68	65	62
Blank	72	72	74	81	76	72
MS	60	57	67	71	67	64
MSD	60	65	71	74	73	72
OPR	58	63	65	71	68	65
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-12378-PeCDD	13C12-123478-HxCDD	13C12-123678-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1438204
Reported: 12/30/13 at 09:52 AM

Surrogate Quality Control

7300107	98	72	75	72	79	79
7300108	98	72	75	70	81	81
7300109	87	65	66	62	75	74
7300110	95	78	81	71	81	81
7300112	92	75	74	75	86	87
7300113	84	67	66	65	78	77
7300114	84	67	65	56	71	66
Blank	104	79	83	82	89	89
MS	87	65	66	62	75	74
MSD	95	78	81	71	81	81
OPR	94	71	75	70	77	78
Limits:	28-143	26-138	17-157	25-181	32-141	28-130

	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
7300107	80	89	96	55	65
7300108	82	88	95	56	66
7300109	74	78	82	54	60
7300110	82	90	95	53	66
7300112	86	87	88	67	73
7300113	77	79	79	56	63
7300114	73	77	76	55	55
Blank	89	97	105	63	77
MS	74	78	82	54	60
MSD	82	90	95	53	66
OPR	77	86	96	53	63
Limits:	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

SSFL Phase 3 Chain of Custody

13013 1438204 7300094-115

CDM Smith

DateShipped: 12/3/2013
CarrierName: FedEx
AirbillNo: 7973 0122 0162

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131203-01
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-502-NBZ-SB-0.0-0.5	12/3/13 09:20	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-502-NBZ-SB-4.0-5.0	12/3/13 09:35	SO	None	1 - 16 oz glass	10 day																	X				X															
SL-502-NBZ-SB-4.0-5.0	12/3/13 09:35	SO	None	2 - Encore	10 day																				X															
SL-503-NBZ-SB-0.0-0.5	12/3/13 10:00	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-503-NBZ-SB-2.0-3.0	12/3/13 10:20	SO	None	1 - 16 oz glass	10 day																	X				X															
SL-503-NBZ-SB-2.0-3.0	12/3/13 10:20	SO	None	2 - Encore	10 day																																				
SL-504-NBZ-SB-0.0-0.5MS	12/3/13 10:45	SO	None	2 - SS-Sleeve	10 day																	X				X															
SL-804-NBZ-SB-0.0-0.5	12/3/13 10:55	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-530-NBZ-SB-0.0-0.5	12/3/13 09:40	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-531-NBZ-SB-0.0-0.5	12/3/13 13:50	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-532-NBZ-SB-0.0-0.5	12/3/13 10:20	SO	None	1 - SS-Sleeve	10 day																	X				X															
SL-533-NBZ-SB-0.0-0.5	12/3/13 13:05	SO	None	1 - SS-Sleeve	10 day																X					X															
SL-509-NBZ-SB-2.5-3.5MS	12/3/13 13:30	SO	None	6 - Encore	10 day																				X															
SL-809-NBZ-SB-2.5-3.5	12/3/13 13:40	SO	None	2 - Encore	10 day																				X															
SL-510-NBZ-SB-4.0-5.0	12/3/13 14:45	SO	None	2 - Encore	10 day																				X															
TB-120313	12/3/13 08:00	WQ	HCl	3 - 40 mL Vial	10 day																				X															

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	12/3/13	1600									

Brandy Barker 12.4.13 935

SSFL Phase 3 Chain of Custody

13013 1438204 7300094-115

CDM Smith

DateShipped: 12/3/2013
CarrierName: FedEx
AirbillNo: 7973 0122 0162

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131203-03
Cooler #: 2
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7471 (Soil)	Mercury 7470 (Water)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
SL-509-NBZ-SB-0.0-0.5	12/3/13 13:15	SO	None	2 - SS-Sleeve	10 day							X		X	X							X				X														
SL-509-NBZ-SB-0.0-0.5	12/3/13 13:15	SO	None	1 - 4 oz glass	10 day													X																						
SL-509-NBZ-SB-2.5-3.5MS	12/3/13 13:30	SO	None	6 - 16 oz glass	10 day							X		X	X			X				X				X														
SL-809-NBZ-SB-2.5-3.5	12/3/13 13:40	SO	None	2 - 16 oz glass	10 day							X		X	X			X				X				X														
SL-510-NBZ-SB-0.0-0.5	12/3/13 14:30	SO	None	1 - 4 oz glass	10 day													X																						
SL-510-NBZ-SB-0.0-0.5	12/3/13 14:30	SO	None	2 - SS-Sleeve	10 day							X		X	X							X				X														
SL-510-NBZ-SB-4.0-5.0	12/3/13 14:45	SO	None	2 - 16 oz glass	10 day							X		X	X			X				X				X														

Special Instructions:

Sampler:

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	12/3/13	1601									
									Brandy Darby	12.4.13	935

SSFL Phase 3 Chain of Custody

13013 1438204 7300094-115

CDM Smith

DateShipped: 12/3/2013
CarrierName: FedEx
AirbillNo: 7973 0122 0162

Contact Name: Pam Hartman
Contact Phone: (818)466-8007

COC No: 20131203-02
Cooler #: 1
Lab: Lancaster
Lab Phone: 717-556-7259
Lab Address: 2425 New Holland Pike
Lancaster, PA 17601

Sample	Date/ Time	Matrix	Preserv.	Type/No of Containers	Turn Around Time	Metals 6010 and 6020	Mercury 7470 (Water)	Mercury 7471 (Soil)	Fluoride 300.0/9056	SVOC 8270	TIC 8270	PAHs 8270 SIM	1,4 Dioxane 8270 SIM	Dioxins 1613	PCBs/PCTs 8082	Perchlorate 314.0/331	Perchlorate Confirm 6850/6860	pH 9045 (Soil)	pH 9040 (Water)	Hex Cr 7196/7199	Herbicides 8151	Pesticides 8081	VOCs 8260	1,4 Dioxane 8260 SIM	TPH-GRO 8015	TPH-EFH 8015	Glycols 8015	Alcohols 8015	Terphenyls 8015	Nitrates 300.0/9056	Energetics 8330	Cyanide 9012	Formaldehyde 8315	NDMA 1625	Organotin	Methyl Mercury 1630	Total Nitrogen ASTM D5373	TOC ASTM D5310	Grain Size ASTM 2488-09a	Other Analysis/Notes
EB-120313	12/3/13 15:00	WQ	None	1 - 250 mL Amber	10 day							X																												

Special Instructions:

Sampler: Pamela Hartman

Relinquished by	Date	Time	Received by	Date	Time	Relinquished by	Date	Time	Received by	Date	Time
	12/3/13	1600									
									Brianca Baird	12.4.13	935

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Environmental Sample Administration Receipt Documentation Log

1438204

Client/Project: CDM

Date of Receipt: 12.4.13

Time of Receipt: 935

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	1.5	TB	WI	Y	B	
2	↓	3.4	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brianna Barela 2299 **Date/Time:** 12.4.13 1029

Issued by Dept. 6042 Management

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Appendix C
Data Usability Assessment Report and Data Validation Reports
(On CD)

Appendix C
Data Usability Assessment Report

The purpose of this data usability and assessment report (DUAR) is to summarize the data validation performed on the data set for Subarea 5A samples collected, and determine whether the sample results meet the Data Quality Objectives (DQOs) outlined in the following documents:

- *Master Field Sampling Plan for Chemical Data Gap Investigation Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Federal Programs Corporation [CDM Smith] 2012a) (Master Field Sampling Plan [FSP])
- *Addendum No. 4 to Master Field Sampling Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, Subarea 5A* (CDM Smith 2012b) (Addendum to the Master FSP)
- *Phase 3 Subarea 5A North Implementation Plan, Santa Susana Field Laboratory* (United States Department of Energy [DOE] 2013)

The Master FSP is Appendix A of *Work Plan for Chemical Data Gap Investigation, Phase 3 Soil Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Smith 2012b) (Work Plan), which also includes Appendix B, Quality Assurance Project Plan (QAPP); Appendix C, Worker Safety and Health Program; and Appendix D, Standard Operating Procedures (SOPs).

C.1 Usability Summary

For this data usability assessment, 29 data sets were reviewed for Subarea 5A. A data set consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date of when the samples were received by the laboratory. A data set is called a sample delivery group (SDG). The analytical methods and procedures performed are discussed in Section 2.5 of the Subarea 5A Technical Memorandum (TM).

Samples were collected and analyzed in accordance with the Master FSP (CDM Smith 2012a). Deviations were encountered during the field investigation for the Subarea 5A sampling activities and are discussed in detail in Section 2.7 of the Subarea 5A TM.

The validated data for Subarea 5A samples are usable as reported with the exception of one rejected hexavalent chromium result and one rejected SVOC result. This equates to 0.0127 percent of the results.

The validated data for Phase 3 Subarea 5A samples are usable as reported with the exception of the rejected data. These rejected results do not impact project objectives and goals. Specific details are provided in the validation reports in this appendix and below.

C.2 Data Validation Procedures

Data were validated by the independent data validation firm Laboratory Data Consultants, Inc. All data validation was conducted in accordance with *U.S. Environmental Protection Agency (EPA) Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004), *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008), and *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005).

The data validation strategy was to validate 10 percent of the data according to EPA Level IV protocols (all QC parameters and raw data) and the remaining 90 percent according to EPA Level III (all QC parameters except calibrations and raw data) protocols. The Level IV determination also included reviewing 10 percent for each laboratory and each method. In order to achieve this, the validators chose appropriate samples in each SDG. Hence, not all samples in some of the SDGs were Level IV validated but they received a mixture of Level IV and Level III review.

Table C-1 shows all SDGs that include Subarea 5A samples. Some SDGs contain samples from other subareas but all samples in an SDG were validated together.

In order to evaluate the quality of the laboratory and the validation firm, CDM Smith chemists reviewed 10 percent of the Subarea 5A sample SDGs. The purpose of the review was to identify any quality control issues with the laboratory not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM Smith's review.

C.3 Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for evaluating and measuring data quality.

A review of the collected data is necessary to determine if DQOs established in the Master FSP (CDM Smith 2012a) have been met. The following data measurement tasks were evaluated:

- Specification and adherence to analytical method and reporting limit requirements
- Identification of the appropriate laboratory analytical QC requirements and verification that QC requirements were met
- Verification that measurement performance criteria (representativeness and completeness) for the data were met
- Verification that field procedures were followed, deviations were documented, and determination of impact on data quality from these deviations

The data validation review determines if the collected data are of sufficient quality to support their intended use.

C.4 Summary of Field and Laboratory QA Activities

CDM Smith completed sampling activities in Subarea 5A in accordance with the approved Master FSP (CDM Smith 2012a) and discussed in the Subarea 5A TM. A total of 200 soil samples in Subarea 5A were collected and analyzed from the sample locations in Subarea 5A. Table 2-1 in the Subarea 5A TM provide a summary of the samples collected and the laboratory analyses requested.

An index of samples associated with each SDG is presented at the beginning of the data validation reports presented in this appendix. The Master FSP (CDM Smith 2012a) defined the procedures to be followed and the data quality requirements for the field sampling events.

C.5 Field Quality QA/QC

The matrix spike/matrix spike duplicates (MS/MSDs) and field duplicates samples were collected at a frequency of approximately 1 per 20 samples (5 percent). During sampling in Subarea 5A, a total of 16 field duplicate/MS/MSD samples were collected equating to approximately eight percent. On an individual method basis, the five percent goal was met or exceeded for all analyses. Field duplicate and MS/MSD samples met the frequency requirements detailed in the Master FSP (CDM Smith 2012a).

Sixteen equipment rinsate blank samples were collected for Subarea 5A. The equipment rinsate blank results are presented in Table C-2.

Two field blanks were collected during sampling for Subarea 5A. The results for these samples are presented in Table C-3.

Twenty-two trip blank samples were shipped with the Subarea 5A samples. The results for these samples are presented in Table C-4. Data qualifications based on blank detections are discussed in Section C.7.3 and in the Appendix C validation reports.

Temperature blanks were included with each shipment of samples. Based on validation results, all temperature blanks for Subarea 5A met criteria.

As stated previously, on an individual method basis, the five percent goal was met or exceeded for all analyses. Field duplicate and MS/MSD samples met the frequency requirements detailed in the Master FSP (CDM Smith 2012a) for the Phase 3 Subarea 5A sampling program. Further, field QA/QC objectives were attained through the use of appropriate sampling techniques and collection of the required number and frequency of QC samples.

C.6 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The

majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in this appendix with the appropriate qualifiers applied. Two results were rejected for Subarea 5A and are discussed below.

C.7 Data Quality Indicators

This section summarizes the validation performed. Individual SDG validation reports with specific sample detail are provided in this appendix.

Achievement of the DQOs was determined in part by the use of data quality indicators (DQIs) as described in the Master FSP (CDM Smith 2012a). These DQIs for measurement data are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in the sections below.

C.7.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

RPD is calculated as follows:

$$\mathbf{RPD = absolute\ value\ [(C1-C2)/\{(C1+C2)/2)\}]\ x\ 100\%}$$

Where:

C1 = concentration of primary sample
C2 = concentration of duplicate sample

Field and analytical precision were determined from the review of the field duplicate results. The sample results were compared by calculating their RPDs. The field duplicate samples were collected in the same manner as the original samples but were collected in separate, individual containers, given separate sample identifiers, and treated as individual samples by the laboratory.

Laboratory duplicate RPD control limits are presented in the Work Plan (CDM Smith 2012c) or are laboratory specific. For laboratory duplicates, if one or both of the sample results were less than two times the RL, a control limit of the absolute difference equal to the RL value was used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project were validated using the following: If one result is non-detect and the other result is above the RL, the RPD result is shown as 200 percent and the field duplicate sample and parent sample results are qualified as estimated "J" or "UJ." If the field duplicate RPD was above the 50 percent criterion (and both sample results were above the RL), the field duplicate and parent sample results for that analyte were qualified as estimated "J."

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory and field duplicate precision results. Details are discussed in the laboratory validation reports in this appendix. Table C-5 shows the field duplicate pairs and RPD results for Subarea 5A. RPD results outside of criteria are highlighted.

Laboratory precision criteria for Phase 3 Subarea 5A samples required the qualification of the following analytes:

- 201 metal results
- 6 hexavalent chromium results

Field duplicate precision criteria for Phase 3 Subarea 5A samples required the qualification of the following analytes:

- 150 dioxin results
- 38 metal results
- 3 hexavalent chromium results
- 2 mercury results
- 1 terphenyl result
- 1 alcohol result
- 14 TPH GRO/EFH results
- 10 pesticide results
- 2 PCB/PCT results
- 1 VOC result
- 92 SVOC SIM results

No results were rejected based on field duplicate precision criteria. All field duplicate RPD results are presented in Appendix C. In summary, sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions with a degree of caution.

There is no discernable pattern or reason for the laboratory and field sample RPD exceedances identified. No field sampling issues were identified from the RPD results that were outside of criteria and the exceedances are reasonable for this type of sampling activity.

C.7.2 Accuracy

Accuracy is the degree of agreement between a measurement and the accepted reference or true value and is a measure of the bias in a system. Accuracy of the data was assessed by comparing LCS recovery, MS recovery, calibration recovery, Inductively Coupled Plasma (ICP) interferences, and by performing serial dilution checks during metals analyses. Accuracy is expressed as percent recovery (%R), which is calculated by:

$$\textbf{Percent Recovery} = \frac{\textbf{(Total Analyte Found – Analyte Originally Present)}}{\textbf{Analyte Added}} \times 100$$

Analytical accuracy for the entire data collection activity is difficult to assess because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained to the extent possible by adhering to the approved analytical method and field and analytical standard operating procedures.

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory accuracy results and are discussed in detail in the laboratory validation reports in Appendix C.

The following Subarea 5A individual analyte results were qualified as estimated "J/UJ" based on accuracy criteria:

- 11 dioxin results, 581 metal results, 3 hexavalent chromium results, 22 TPH GRO/EFH results, 2 pesticide results, 1 VOC result, and 55 SVOC SIM results due to MS recoveries
- 154 metal analyte results due to serial dilutions
- 1 PCB result and 34 SVOC SIM results for LCS recoveries
- 5 TPH GRO/EFH results and 2 VOC SIM (1,4-Dioxane) results for surrogate recoveries
- 8 dioxins results and 1 alcohol result for second column confirmation results
- 1 PCB result, 6 SVOC results and 5 SVOC SIM results for calibration criteria
- 8 SVOC SIM results for internal standard criteria

The following individual analyte results were rejected "R" based on accuracy criteria:

- 1 hexavalent chromium result based on MS criteria
- 1 SVOC result (benzidine) based on MS criteria

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation, holding times and handling criteria were met except for one formaldehyde result. This result was qualified as estimated “J/UJ.”

Sample results that have been qualified as estimated "J/UJ" due to accuracy criteria are usable for project decisions. Sample results that have been rejected are not usable for project decisions.

C.7.3 Blank Contamination

Field blanks (e.g., equipment and trip) and laboratory method blanks are analyzed to identify possible sources of contamination. Contamination of a sample can be introduced by field sample collection methods, sample handling, preparation, and/or analysis. The laboratory validation reports in this appendix and summarized below discuss the results qualified based on field and laboratory blank contamination.

The following individual analyte results were qualified as nondetect "U" based on laboratory blank contamination for the Subarea 5A samples:

- 1,249 dioxin results (39% of all dioxin results)
- 297 metal results (5.6% of all metal results)

For the dioxins, MDLs for this analysis are very low, reported in nanogram per kilogram (ng/kg) or parts per trillion, resulting in numerous results qualified as estimated "J." Many of these estimated values have been subsequently qualified as non-detect "U" because the compound was detected in related laboratory blanks. In the laboratory blanks, low level detections of dioxin analytes are somewhat inevitable because of the nature and universal extent of the compounds. The dioxin levels found in the blanks are well below site-related action levels. Therefore, the resulting qualification of associated sample results as not detected or "U" does not falsely diminish identification of site-related contaminants.

Tables C-2 through C-4 provide a summary of chemicals observed in the equipment, field and trip blank samples. Most of the equipment blanks, field blanks and trip blanks detected compounds were below the RLs but above the MDLs. ASTM International Type II water is not typically certified "clean" to the low RLs established for the low level methods used for the co-located sampling program.

A review of the Phase 3 equipment blanks for Subarea 5A was also performed. In general, a variety of analytes were detected above their respective RLs. All Phase 3 equipment blanks will continue to be monitored to determine if these low level detections are consistent, thus indicating a possible deficiency in decontamination procedures and/or source water impacts that need to be addressed and corrected.

For Subarea 5A, 175 metal results and 8 SVOC SIM results were qualified based on field/equipment blanks results. To date, chemical detections in equipment blank samples appear to be random occurrences.

Trip blank results are presented in Table C-4. All the trip blank results were nondetect.

C.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the Work Plan (CDM Smith 2012c) for this sampling event and future sampling events, sample analysis should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future

sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

C.7.4.1 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection are designed to maximize sample representativeness.

Representativeness also can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the CoC forms, field data collection forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the Master FSP (CDM Smith 2012a) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the approved Master FSP (CDM Smith 2012a) and by using approved standard operating procedures for field data collection. Based on this, the data should represent as near as possible the actual field conditions at the time of sampling.

Representativeness has been achieved by the performed field work and laboratory analyses. The analytical data generated, that have not been rejected, are viewed to be a representative characterization of the project area.

C.7.4.2 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed, or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and Department of Toxic Substances Control (DTSC)-approved analytical methods were utilized by CDM Smith. The sample analyses were performed by Eurofins Lancaster Laboratories. Utilizing such procedures and methods enables the current data to be comparable with previous and future data sets generated with similar methods.

C.7.4.3 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as risk-based screening levels or action levels. Analytical detection limits for the various sample analytes should be below the level of interest to allow an effective comparison.

Detection Limits

Each analytical method used during the sampling events was selected because it had potential to achieve RLs established for this project. RLs were established for each analyte in consultation with the laboratory to achieve analytical results at or below regulatory comparison criteria.

The method detection limit (MDL) is defined as the concentration of an analyte that produces a signal with a 99 percent confidence that the concentration is above that of a blank but that that concentration cannot be accurately quantified. A blank is a sample that does not contain measurable concentrations of the analyte of concern. Tested by statistical performance, calibration samples, and LCSs, MDLs represent the best fundamental measurement of instrument sensitivity and the basis for establishing RLs.

The laboratory RL is typically about 3 to 5 times higher than the MDL and is a laboratory-specific number. The actual sample RL is variable based on the sample matrix, moisture content, and other sample-specific factors. When a sample has to be diluted before analysis, either because of matrix problems or to bring the instrument response within the linear dynamic range, the RL is raised by a factor corresponding to the dilution factor.

In reporting environmental sample results, laboratories follow protocols that help ensure that the result reported is at the lowest level and is defensible, taking into account the ability of the instrument to differentiate a signal generated by the analyte from the background instrument noise, imprecision added to the detection capabilities of the analyte due to the sample processing manipulations (MDLs) and sample matrix affects, and adjustments made to the detection limits based on difficulties encountered in analyzing the sample (dilution factors, etc.).

The result for an analyte is flagged with a "U" if that analyte was not detected, or qualified with a "J" flag if blank or other QC results fall outside the appropriate tolerance limits. If an analyte is present at a concentration between the MDL and the RL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

The following analyses and individual analyte sample results were qualified as estimated "J" due to the sample results being reported as detected below the RL for Subarea 5A samples:

- Method 1613B (Dioxins)
  - 1,173 individual analyte results
- Methods 6010C/6020A (Metals)
  - 1,028 individual analyte results
- Methods 7199 (Hexavalent Chromium)
  - 4 individual analyte results
- Methods 7471B (Mercury)
  - 64 individual analyte results

- Method 8015B (Terphenyls)
  - 2 individual analyte results
- Method 8015C (Alcohols)
  - 1 individual analyte result
- Method 8015M (TPH GRO/EFH)
  - 71 individual analyte results
- Method 8081B (Pesticides)
  - 4 individual analyte results
- Method 8082A (PCBs)
  - 7 individual analyte results
- Method 8260B (VOCs)
  - 1 individual analyte results
- Method 8270D (SVOCs)
  - 8 individual analyte results
- Method 8270D SIM (SVOCs)
  - 506 individual analyte results

For the data validated in the Subarea 5A TM, RLs for a majority of the sample results were low enough to compare to the RLs stated in the Master FSP (CDM Smith 2012a). RLs above those stated in the Master FSP (CDM Smith 2012a) will be evaluated on a case by case basis to see if resampling is required.

C.8 Review of Selected Validation Reports

CDM Smith performed a review of 10 percent of the validation reports identified in Table C-1. This review involved comparing the validation report results against the laboratory data packages as well as the validation guidance documents. All validation report results that were reviewed were verified against the laboratory data packages and determined that validation documents were followed as required.

C.9 Data Completeness

Completeness of the data collection program is defined as the percentage of samples planned for collection as listed in the Master FSP (CDM Smith 2012a) versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

A. $$\%Completeness = Cx\frac{100}{n}$$

Where:

C = actual number of samples collected
n = total number of samples planned

B. $$\%Completeness = Vx\frac{100}{n'}$$

Where:

V = number of measurements judged valid
n' = total number of measurements made

The overall completeness goal, as defined in the Master FSP (CDM Smith 2012a), for this sampling events was 90 percent for each analytical test for all project data.

A total of 200 soil samples including the field duplicates were collected and analyzed. Some locations required only a subsurface sample while other locations required both a surface and a subsurface sample. The number of subsurface samples to be collected at each location was not pre-determined because the total depth of each boring varies depending on the local geology. The completeness goal for the actual number of samples collected compared to the number of samples planned is considered acceptable as a sample was collected from each location (depending on shallow refusal).

The completeness goal achieved for acceptable data was 99.99 percent for Subarea 5A for the number of measurements judged to be valid versus the total number of measurements made for all samples analyzed.

The following Phase 3 Subarea 5A individual analyte results were rejected per analyses:

- Method 7199
  - One out of 12 hexavalent chromium results (8.33 percent)
- Method 8270D
  - One out of 111 SVOC (benzidine) results (0.9 percent)

Table C-6 summarizes all results that were estimated or rejected for Phase 3 Subarea 5A.

The completeness goals for both the locations sampled and the number of measurements judged to be valid were met or are planned to be met.

Sampling deviations from procedures described in the Master FSP (CDM Smith 2012a) are discussed in Section 2.7 of the Subarea 5A Phase 3 TM. Deviations did not impact DQOs for this sampling event. The data reported are suitable for their intended use for characterization of Area IV of SSFL. The DQIs identified in the Master FSP (CDM Smith 2012a) met appropriate criteria. The completeness goals for both the locations sampled and the number of measurements judged to be valid were met or will be met. The achievement of the

completeness goals for the data indicates a sufficient amount of usable data has been generated for project decisions.

C.10 Assessment of Data Usability and Reconciliation with WP/FSAP Goals

Over 99 percent of the data validated for Subarea 5A Phase 3, are suitable for their intended use for site characterization. Sample results that were qualified as estimated are usable for project decisions. Rejected sample results are not suitable for project use. The rejected analyte results do not impact achievement of the overall project objectives. The RLs reported generally met the expected limits proposed by the analytical laboratories in their subcontract agreements with CDM Smith.

Field duplicate precision also met criteria a majority of the time. RPDs were outside criteria predominantly when the sample results were close to the RL and/or below the project required action limits. Decisions based on results close to the RL should be made with a degree of caution. The achievement of the completeness goals for number of samples collected, and the number of sample results acceptable for use provides sufficient quality data to support project decisions.

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Appendix C. Samples by SDG for Phase 3 Subarea 5A				
Task Code	**System Sample Code**	**Lab SDG**	**Matrix Code**	**Sample Date**
5A_DG	SL-828-SA5A-SB-0.0-0.5	PH041	SO	5/28/2013
5A_DG	SL-829-SA5A-SB-0.0-0.5	PH041	SO	5/28/2013
5A_DG	SL-830-SA5A-SB-0.0-0.5	PH041	SO	5/28/2013
5A_DG	SL-830-SA5A-SB-2.75-3.75	PH041	SO	5/28/2013
5A_DG	TB-052813	PH041	WQ	5/28/2013
5A_DG	EB-052913	PH042	WQ	5/29/2013
5A_DG	SL-831-SA5A-SB-0.0-0.5	PH042	SO	5/29/2013
5A_DG	SL-831-SA5A-SB-4.5-5.5	PH042	SO	5/29/2013
5A_DG	SL-832-SA5A-SB-0.0-0.5	PH042	SO	5/29/2013
5A_DG	SL-832-SA5A-SB-4.0-5.0	PH042	SO	5/29/2013
5A_DG	SL-832-SA5A-SB-7.2-8.2	PH042	SO	5/29/2013
5A_DG	SL-842-SA5A-SB-0.0-0.5	PH042	SO	5/29/2013
5A_DG	SL-843-SA5A-SB-0.0-0.5	PH042	SO	5/29/2013
5A_DG	SL-844-SA5A-SB-0.0-0.5	PH042	SO	5/29/2013
5A_DG	TB-052913	PH042	WQ	5/29/2013
5A_DG	EB-053013	PH043	WQ	5/30/2013
5A_DG	SL-1237-SA5A-SB-4.5-5.5	PH043	SO	5/30/2013
5A_DG	SL-819-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-819-SA5A-SB-6.5-7.5	PH043	SO	5/30/2013
5A_DG	SL-833-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-833-SA5A-SB-2.5-3.5	PH043	SO	5/30/2013
5A_DG	SL-834-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-834-SA5A-SB-2.4-3.4	PH043	SO	5/30/2013
5A_DG	SL-835-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-836-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-836-SA5A-SB-2.5-3.5	PH043	SO	5/30/2013
5A_DG	SL-837-SA5A-SB-0.0-0.5	PH043	SO	5/30/2013
5A_DG	SL-837-SA5A-SB-4.5-5.5	PH043	SO	5/30/2013
5A_DG	TB-053013	PH043	WQ	5/30/2013
5A_DG	SL-1238-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	SL-815-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	SL-838-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	SL-839-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	SL-840-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	SL-841-SA5A-SB-0.0-0.5	PH044	SO	5/31/2013
5A_DG	EB1-060513	PH047	WQ	6/5/2013
5A_DG	EB2-060513	PH047	WQ	6/5/2013
5A_DG	SL-772-SA5A-SB-0.0-0.5	PH047	SO	6/4/2013
5A_DG	SL-811-SA5A-SB-0.0-0.5	PH047	SO	6/5/2013
5A_DG	SL-811-SA5A-SB-5.5-6.5	PH047	SO	6/5/2013
5A_DG	SL-813-SA5A-SB-0.0-0.5	PH047	SO	6/5/2013
5A_DG	SL-814-SA5A-SB-0.0-0.5	PH047	SO	6/5/2013
5A_DG	SL-814-SA5A-SB-4.0-5.0	PH047	SO	6/5/2013
5A_DG	SL-858-SA5A-SB-0.0-0.5	PH047	SO	6/5/2013
5A_DG	SL-861-SA5A-SB-0.0-0.5	PH047	SO	6/5/2013
5A_DG	SL-861-SA5A-SB-4.0-5.0	PH047	SO	6/5/2013
5A_DG	SL-861-SA5A-SB-7.0-8.0	PH047	SO	6/5/2013
5A_DG	TB-060513	PH047	WQ	6/5/2013
5A_DG	SL-1271-SA5A-SB-0.0-0.5	PH050	SO	6/6/2013
5A_DG	SL-862-SA5A-SB-0.0-0.5	PH050	SO	6/6/2013
5A_DG	SL-862-SA5A-SB-4.5-5.5	PH050	SO	6/6/2013
5A_DG	SL-871-SA5A-SB-0.0-0.5	PH050	SO	6/6/2013
5A_DG	SL-872-SA5A-SB-0.0-0.5	PH050	SO	6/6/2013
5A_DG	SL-872-SA5A-SB-2.5-3.5	PH050	SO	6/6/2013
5A_DG	SL-873-SA5A-SB-0.0-0.5	PH050	SO	6/6/2013
5A_DG	TB-060613	PH050	WQ	6/6/2013
5A_DG	SL-827-SA5A-SB-0.0-0.5	PH051	SO	6/7/2013
5A_DG	SL-845-SA5A-SB-0.0-0.5	PH051	SO	6/7/2013
5A_DG	SL-846-SA5A-SB-0.0-0.5	PH051	SO	6/7/2013
5A_DG	SL-847-SA5A-SB-0.0-0.5	PH051	SO	6/7/2013
5A_DG	SL-848-SA5A-SB-0.0-0.5	PH051	SO	6/7/2013

Appendix C. Samples by SDG for Phase 3 Subarea 5A				
Task Code	**System Sample Code**	**Lab SDG**	**Matrix Code**	**Sample Date**
5A_DG	SL-1174-SA5A-SB-0.0-0.5	PH052	SO	6/10/2013
5A_DG	SL-1176-SA5A-SB-6.0-7.0	PH052	SO	6/10/2013
5A_DG	SL-773-SA5A-SB-0.0-0.5	PH052	SO	6/10/2013
5A_DG	SL-774-SA5A-SB-0.0-0.5	PH052	SO	6/10/2013
5A_DG	SL-776-SA5A-SB-0.0-0.5	PH052	SO	6/10/2013
5A_DG	SL-776-SA5A-SB-6.0-7.0	PH052	SO	6/10/2013
5A_DG	SL-1176-SA5A-SB-6.0-7.0	PH053	SO	6/10/2013
5A_DG	SL-776-SA5A-SB-6.0-7.0	PH053	SO	6/10/2013
5A_DG	SL-777-SA5A-SB-0.0-0.5	PH053	SO	6/10/2013
5A_DG	SL-779-SA5A-SB-0.0-0.5	PH053	SO	6/10/2013
5A_DG	TB-061013	PH053	WQ	6/10/2013
5A_DG	SL-1183-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-783-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-785-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-786-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-787-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-788-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-789-SA5A-SB-0.0-0.5	PH054	SO	6/11/2013
5A_DG	SL-789-SA5A-SB-5.0-6.0	PH054	SO	6/11/2013
5A_DG	TB-061113	PH054	WQ	6/11/2013
5A_DG	EB1-061213	PH055	WQ	6/12/2013
5A_DG	EB2-061213	PH055	WQ	6/12/2013
5A_DG	SL-1178-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-778-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-778-SA5A-SB-4.0-5.0	PH055	SO	6/12/2013
5A_DG	SL-781-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-781-SA5A-SB-2.0-3.0	PH055	SO	6/12/2013
5A_DG	SL-782-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-782-SA5A-SB-4.5-5.5	PH055	SO	6/12/2013
5A_DG	SL-784-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-784-SA5A-SB-2.5-3.5	PH055	SO	6/12/2013
5A_DG	SL-826-SA5A-SB-0.0-0.5	PH055	SO	6/12/2013
5A_DG	SL-826-SA5A-SB-14.0-15.0	PH055	SO	6/12/2013
5A_DG	SL-826-SA5A-SB-4.0-5.0	PH055	SO	6/12/2013
5A_DG	SL-826-SA5A-SB-9.0-10.0	PH055	SO	6/12/2013
5A_DG	TB-061213	PH055	WQ	6/12/2013
5A_DG	SL-775-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-790-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-791-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-792-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-793-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-795-SA5A-SB-0.0-0.5	PH056	SO	6/13/2013
5A_DG	SL-1252-SA5A-SB-0.0-0.5	PH057	SO	6/14/2013
5A_DG	SL-850-SA5A-SB-0.0-0.5	PH057	SO	6/14/2013
5A_DG	SL-852-SA5A-SB-0.0-0.5	PH057	SO	6/14/2013
5A_DG	SL-852-SA5A-SB-4.5-5.5	PH057	SO	6/14/2013
5A_DG	SL-869-SA5A-SB-0.0-0.5	PH057	SO	6/14/2013
5A_DG	SL-870-SA5A-SB-0.0-0.5	PH057	SO	6/14/2013
5A_DG	TB-061413	PH057	WQ	6/14/2013
5A_DG	SL-1180-SA5A-SB-3.0-4.0	PH058	SO	6/17/2013
5A_DG	SL-780-SA5A-SB-0.0-0.5	PH058	SO	6/17/2013
5A_DG	SL-780-SA5A-SB-3.0-4.0	PH058	SO	6/17/2013
5A_DG	SL-822-SA5A-SB-0.0-0.5	PH058	SO	6/17/2013
5A_DG	SL-823-SA5A-SB-0.0-0.5	PH058	SO	6/17/2013
5A_DG	SL-824-SA5A-SB-0.0-0.5	PH058	SO	6/17/2013
5A_DG	SL-825-SA5A-SB-0.0-0.5	PH058	SO	6/17/2013
5A_DG	TB-061713	PH058	WQ	6/17/2013

Appendix C. Samples by SDG for Phase 3 Subarea 5A				
Task Code	**System Sample Code**	**Lab SDG**	**Matrix Code**	**Sample Date**
5A_DG	SL-854-SA5A-SB-0.0-0.5	PH059	SO	6/18/2013
5A_DG	SL-854-SA5A-SB-4.0-5.0	PH059	SO	6/18/2013
5A_DG	SL-855-SA5A-SB-0.0-0.5	PH059	SO	6/18/2013
5A_DG	SL-860-SA5A-SB-0.0-0.5	PH059	SO	6/18/2013
5A_DG	SL-860-SA5A-SB-10.5-11.5	PH059	SO	6/18/2013
5A_DG	SL-860-SA5A-SB-4.0-5.0	PH059	SO	6/18/2013
5A_DG	SL-864-SA5A-SB-0.0-0.5	PH059	SO	6/18/2013
5A_DG	SL-864-SA5A-SB-4.0-5.0	PH059	SO	6/18/2013
5A_DG	TB-061813	PH059	WQ	6/18/2013
5A_DG	EB1-061913	PH060	WQ	6/19/2013
5A_DG	EB2-061913	PH060	WQ	6/19/2013
5A_DG	SL-859-SA5A-SB-0.0-0.5	PH060	SO	6/19/2013
5A_DG	SL-863-SA5A-SB-0.0-0.5	PH060	SO	6/19/2013
5A_DG	SL-863-SA5A-SB-4.0-5.0	PH060	SO	6/19/2013
5A_DG	SL-865-SA5A-SB-0.0-0.5	PH060	SO	6/19/2013
5A_DG	SL-865-SA5A-SB-4.0-5.0	PH060	SO	6/19/2013
5A_DG	SL-865-SA5A-SB-9.0-10.0	PH060	SO	6/19/2013
5A_DG	SL-866-SA5A-SB-0.0-0.5	PH060	SO	6/19/2013
5A_DG	SL-866-SA5A-SB-5.5-6.5	PH060	SO	6/19/2013
5A_DG	TB-061913	PH060	WQ	6/19/2013
5A_DG	SL-867-SA5A-SB-0.0-0.5	PH061	SO	6/20/2013
5A_DG	SL-867-SA5A-SB-3.5-4.5	PH061	SO	6/20/2013
5A_DG	SL-868-SA5A-SB-0.0-0.5	PH061	SO	6/20/2013
5A_DG	SL-868-SA5A-SB-4.0-5.0	PH061	SO	6/20/2013
5A_DG	TB-062013	PH061	WQ	6/20/2013
5A_DG	SL-849-SA5A-SB-0.0-0.5	PH077	SO	7/29/2013
5A_DG	SL-851-SA5A-SB-0.0-0.5	PH077	SO	7/29/2013
5A_DG	SL-853-SA5A-SB-0.0-0.5	PH077	SO	7/29/2013
5A_DG	SL-853-SA5A-SB-3.5-4.5	PH077	SO	7/29/2013
5A_DG	TB2-072913	PH077	WQ	7/29/2013
5A_DG	EB-073013	PH079	WQ	7/30/2013
5A_DG	SL-630A-SA5A-SB-0.0-0.5	PH125	SO	11/11/2013
5A_DG	SL-630B-SA5A-SB-0.0-0.5	PH125	SO	11/11/2013
5A_DG	SL-630C-SA5A-SB-0.0-0.5	PH125	SO	11/11/2013
5A_DG	SL-630D-SA5A-SB-0.0-0.5	PH125	SO	11/11/2013
5A_DG	SL-634-SA5A-SB-0.0-0.5	PH125	SO	11/11/2013
	TB2-111213	PH126	WQ	11/12/2013
5A_DG	SL-628-SA5A-SB-0.0-0.5	PH126	SO	11/12/2013
5A_DG	SL-628-SA5A-SB-6.5-7.5	PH126	SO	11/12/2013
5A_DG	SL-928-SA5A-SB-0.0-0.5	PH126	SO	11/12/2013
	EB1-111213	PH127	WQ	11/12/2013
	TB-111313	PH128	WQ	11/13/2013
5A_DG	SL-654-SA5A-SB-0.0-0.5	PH128	SO	11/13/2013
5A_DG	SL-654-SA5A-SB-3.0-4.0	PH128	SO	11/13/2013
5A_DG	SL-657-SA5A-SB-0.0-0.5	PH128	SO	11/13/2013
5A_DG	SL-657-SA5A-SB-4.0-5.0	PH128	SO	11/13/2013
5A_DG	SL-657-SA5A-SB-7.0-8.0	PH128	SO	11/13/2013
5A_DG	SL-658-SA5A-SB-0.0-0.5	PH128	SO	11/13/2013
5A_DG	SL-658-SA5A-SB-4.0-5.0	PH128	SO	11/13/2013
5A_DG	SL-658-SA5A-SB-7.0-8.0	PH128	SO	11/13/2013
5A_DG	SL-667-SA5A-SB-0.0-0.5	PH128	SO	11/13/2013
5A_DG	SL-667-SA5A-SB-3.0-4.0	PH128	SO	11/13/2013
5A_DG	SL-670-SA5A-SB-0.0-0.5	PH128	SO	11/13/2013
5A_DG	SL-954-SA5A-SB-3.0-4.0	PH128	SO	11/13/2013

Appendix C. Samples by SDG for Phase 3 Subarea 5A				
Task Code	**System Sample Code**	**Lab SDG**	**Matrix Code**	**Sample Date**
	EB-111413	PH129	WQ	11/14/2013
	TB-111413	PH129	WQ	11/14/2013
5A_DG	SL-508-SA5A-SB-0.0-0.5	PH129	SO	11/14/2013
5A_DG	SL-508-SA5A-SB-17.0-18.0	PH129	SO	11/14/2013
5A_DG	SL-508-SA5A-SB-21.0-22.0	PH129	SO	11/14/2013
5A_DG	SL-508-SA5A-SB-33.0-34.0	PH129	SO	11/14/2013
5A_DG	SL-508-SA5A-SB-4.0-5.0	PH129	SO	11/14/2013
5A_DG	SL-508-SA5A-SB-9.0-10.0	PH129	SO	11/14/2013
5A_DG	SL-521-SA5A-SB-0.0-0.5	PH129	SO	11/14/2013
5A_DG	SL-521-SA5A-SB-11.0-12.0	PH129	SO	11/14/2013
5A_DG	SL-521-SA5A-SB-14.0-15.0	PH129	SO	11/14/2013
5A_DG	SL-521-SA5A-SB-9.0-10.0	PH129	SO	11/14/2013
5A_DG	SL-821-SA5A-SB-11.0-12.0	PH129	SO	11/14/2013
	TB-111813	PH131	WQ	11/18/2013
5A_DG	SL-1009-SA5A-SB-4.0-5.0	PH131	SO	11/18/2013
5A_DG	SL-696-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-696-SA5A-SB-4.0-5.0	PH131	SO	11/18/2013
5A_DG	SL-709-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-709-SA5A-SB-4.0-5.0	PH131	SO	11/18/2013
5A_DG	SL-709-SA5A-SB-8.0-9.0	PH131	SO	11/18/2013
5A_DG	SL-710-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-722-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-735-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-735-SA5A-SB-2.5-3.5	PH131	SO	11/18/2013
5A_DG	SL-736-SA5A-SB-0.0-0.5	PH131	SO	11/18/2013
5A_DG	SL-736-SA5A-SB-3.0-4.0	PH131	SO	11/18/2013
	EB-111913	PH132	WQ	11/19/2013
	TB-111913	PH132	WQ	11/19/2013
5A_DG	SL-1008-SA5A-SB-0.0-0.5	PH132	SO	11/19/2013
5A_DG	SL-518-SA5A-SB-0.0-0.5	PH132	SO	11/19/2013
5A_DG	SL-518-SA5A-SB-10.0-11.0	PH132	SO	11/19/2013
5A_DG	SL-518-SA5A-SB-15.0-16.0	PH132	SO	11/19/2013
5A_DG	SL-518-SA5A-SB-7.0-8.0	PH132	SO	11/19/2013
5A_DG	SL-596-SA5A-SB-0.0-0.5	PH132	SO	11/19/2013
5A_DG	SL-596-SA5A-SB-4.0-5.0	PH132	SO	11/19/2013
5A_DG	SL-708-SA5A-SB-0.0-0.5	PH132	SO	11/19/2013
5A_DG	SL-708-SA5A-SB-4.0-5.0	PH132	SO	11/19/2013
5A_DG	SL-732-SA5A-SB-0.0-0.5	PH132	SO	11/19/2013
	TB-112213	PH133	WQ	11/22/2013
5A_DG	SL-673-SA5A-SB-0.0-0.5	PH133	SO	11/22/2013
5A_DG	SL-673-SA5A-SB-10.5-11.5	PH133	SO	11/22/2013
5A_DG	SL-673-SA5A-SB-4.0-5.0	PH133	SO	11/22/2013
5A_DG	SL-676-SA5A-SB-0.0-0.5	PH133	SO	11/22/2013
5A_DG	SL-676-SA5A-SB-4.0-5.0	PH133	SO	11/22/2013
5A_DG	SL-686-SA5A-SB-0.0-0.5	PH133	SO	11/22/2013
5A_DG	SL-986-SA5A-SB-0.0-0.5	PH133	SO	11/22/2013
5A_DG	SL-1015-SA5A-SB-0.0-0.5	PH134	SO	11/25/2013
5A_DG	SL-584-SA5A-SB-0.0-0.5	PH134	SO	11/25/2013
5A_DG	SL-631-SA5A-SB-0.0-0.5	PH134	SO	11/25/2013
5A_DG	SL-715-SA5A-SB-0.0-0.5	PH134	SO	11/25/2013
5A_DG	SL-715-SA5A-SB-6.0-7.0	PH134	SO	11/25/2013
	EB1-112613	PH135	WQ	11/26/2013
	EB2-112613	PH135	WQ	11/26/2013
	TB-112613	PH135	WQ	11/26/2013
5A_DG	SL-713-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-713-SA5A-SB-2.5-3.5	PH135	SO	11/26/2013
5A_DG	SL-719-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-720-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-724-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-738-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-738-SA5A-SB-3.0-4.0	PH135	SO	11/26/2013
5A_DG	SL-767-SA5A-SB-0.0-0.5	PH135	SO	11/26/2013
5A_DG	SL-767-SA5A-SB-2.5-3.5	PH135	SO	11/26/2013

Appendix C. Samples by SDG for Phase 3 Subarea 5A				
Task Code	**System Sample Code**	**Lab SDG**	**Matrix Code**	**Sample Date**
	EB-120213	PH136	WQ	12/2/2013
5A_DG	SL-616-SA5A-SB-0.0-0.5	PH136	SO	12/2/2013
5A_DG	SL-679-SA5A-SB-0.0-0.5	PH136	SO	12/2/2013
	EB-120313	PH138	WQ	12/3/2013

			Sample Name:		EB-052913		EB-053013		EB1-060513		EB2-060513		EB1-061213	
			Location:		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
			Sample Date:		05/29/2013		05/30/2013		06/05/2013		06/05/2013		06/12/2013	
			Sample Type:		EB		EB		EB		EB		EB	
			Lab:		LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L												
1,1,1-Trichloroethane	8260B	µg/L												
1,1,2,2-Tetrachloroethane	8260B	µg/L												
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L												
1,1,2-Trichloroethane	8260B	µg/L												
1,1-Dichloroethane	8260B	µg/L												
1,1-Dichloroethene	8260B	µg/L												
1,1-Dichloropropene	8260B	µg/L												
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,4,6,7,8-HPCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,4,7,8,9-HPCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,4,7,8-HXCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,6,7,8-HXCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,7,8,9-HXCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,7,8-Pentachlorodibenzofuran	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1613B	pg/L	9.93	U	10.9	U	1.12	J	0.757	J	9.78	U		
1,2,3-Trichlorobenzene	8260B	µg/L												
1,2,3-Trichloropropane	8260B	µg/L												
1,2,4-Trichlorobenzene	8260B	µg/L												
1,2,4-Trimethylbenzene	8260B	µg/L												
1,2-Dibromo-3-chloropropane	8260B	µg/L												
1,2-Dibromoethane	8260B	µg/L												
1,2-Dichlorobenzene	8260B	µg/L												
1,2-Dichloroethane	8260B	µg/L												
1,2-Dichloropropane	8260B	µg/L												
1,3,5-Trimethylbenzene	8260B	µg/L												
1,3-Dichlorobenzene	8260B	µg/L												
1,3-Dichloropropane	8260B	µg/L												
1,4-Dichlorobenzene	8260B	µg/L												
1,4-Dioxane	8260B SIM	µg/L												
1-Chlorohexane	8260B	µg/L												
1-Methylnaphthalene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.012	J	0.055	U		
2,2-Dichloropropane	8260B	µg/L												
2,2-Dichlor-Propionic Acid	8151A	µg/L												
2,3,4,6,7,8-HXCDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
2,3,4,7,8-PECDF	1613B	pg/L	9.93	U	10.9	U	9.84	U	9.86	U	9.78	U		
2,3,7,8-TCDD	1613B	pg/L	1.99	U	2.18	U	0.532	J	0.67	J	0.229	J		
2,3,7,8-Tetrachlorodibenzofuran	1613B	pg/L	1.99	U	2.18	U	1.97	U	0.188	J	1.96	U		
2,4,5-T	8151A	µg/L												
2,4-D	8151A	µg/L												
2,4-DB	8151A	µg/L												
2-Butanone (MEK)	8260B	µg/L												
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L												
2-Chloroethyl Vinyl Ether	8260B	µg/L												
2-Chlorotoluene	8260B	µg/L												
2-Hexanone	8260B	µg/L												
2-Methylnaphthalene	8270D SIM	µg/L	0.055	U	0.051	U	0.015	J	0.016	J	0.055	U		
2-Phenylbutane	8260B	µg/L												
2-Propanol	8015C	µg/L												
4,4'-DDD	8081B	µg/L											0.017	U
4,4'-DDE	8081B	µg/L											0.017	U
4,4'-DDT	8081B	µg/L											0.017	U
4-Chlorotoluene	8260B	µg/L												
4-Methyl-2-pentanone (MIBK)	8260B	µg/L												
Acenaphthene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Acenaphthylene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Acetone	8260B	µg/L												
Acrolein	8260B	µg/L												
Acrylonitrile	8260B	µg/L												
Aldrin	8081B	µg/L											0.0085	U
Alpha-Bhc	8081B	µg/L											0.0085	U
Aluminum	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U		
Anthracene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Antimony	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U		
Aroclor 1016	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1221	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1232	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1242	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1248	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1254	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1260	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1262	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 1268	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 5432	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 5442	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Aroclor 5460	8082A	µg/L					0.41	U	0.43	UJ	0.42	U		
Arsenic	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U		
Barium	6010C	mg/L	0.01	U	0.01	U	0.00045	J	0.01	U	0.01	U		
Benzene	8260B	µg/L												
Benzo(a)anthracene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Benzo(a)pyrene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Benzo(b)fluoranthene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Benzo(e)pyrene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Benzo(g,h,i)perylene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.014	J		
Benzo(k)fluoranthene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Beryllium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Beta-Bhc	8081B	µg/L											0.0085	U
Bis(2-ethylhexyl)phthalate	8270D SIM	µg/L	1.1	U	1	U	0.087	J	0.12	J	1.1	UJ		
Boron	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Bromobenzene	8260B	µg/L												
Bromochloromethane	8260B	µg/L												
Bromodichloromethane	8260B	µg/L												
Bromoform	8260B	µg/L												
Bromomethane	8260B	µg/L												
Butylbenzylphthalate	8270D SIM	µg/L	1.1	U	1	U	1	U	1.1	U	1.1	U		
Cadmium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Calcium	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U		
Carbon Disulfide	8260B	µg/L												
Carbon Tetrachloride	8260B	µg/L												
Chlordane	8081B	µg/L											0.42	U
Chlorobenzene	8260B	µg/L												
Chloroethane	8260B	µg/L												
Chloroform	8260B	µg/L												
Chloromethane	8260B	µg/L												
Chlorotrifluoroethylene	8260B	µg/L												
Chromium	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U		
Chromium (Hexavalent Compounds)	7199	µg/L											10	UJ
Chrysene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		

			Sample Name:		EB-052913		EB-053013		EB1-060513		EB2-060513		EB1-061213	
			Location:		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
			Sample Date:		05/29/2013		05/30/2013		06/05/2013		06/05/2013		06/12/2013	
			Sample Type:		EB		EB		EB		EB		EB	
			Lab:		LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
cis-1,2-Dichloroethene	8260B	µg/L												
cis-1,3-Dichloropropene	8260B	µg/L												
Cobalt	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Copper	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Cymene	8260B	µg/L												
Delta-Bhc	8081B	µg/L											0.0085	U
Di isopropyl Ether	8260B	µg/L												
Dibenzo(a,h)anthracene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Dibromochloromethane	8260B	µg/L												
Dibromomethane	8260B	µg/L												
Dicamba	8151A	µg/L												
Dichlorodifluoromethane	8260B	µg/L												
Dichlorprop	8151A	µg/L												
Dieldrin	8081B	µg/L											0.017	U
Diethylphthalate	8270D SIM	µg/L	0.27	J	0.15	J	1	U	1.1	U	1.1	U		
Dimethylphthalate	8270D SIM	µg/L	1.1	U	1	U	1	U	1.1	U	1.1	U		
Di-n-butylphthalate	8270D SIM	µg/L	0.17	J	0.18	J	0.11	J	0.11	J	0.11	J		
Dinitrobutyl Phenol	8151A	µg/L												
Di-n-octylphthalate	8270D SIM	µg/L	1.1	U	1	U	1	U	1.1	U	1.1	UJ		
EFH (C12-C14)	8015M	mg/L	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U		
EFH (C15-C20)	8015M	mg/L	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U		
EFH (C21-C30)	8015M	mg/L	0.098	U	0.1	U	0.1	U	0.1	U	0.099	U		
EFH (C30-C40)	8015M	mg/L	0.49	U	0.5	U	0.51	U	0.51	U	0.49	U		
EFH (C8-C11)	8015M	mg/L	0.098	U	0.1	U	0.1	UJ	0.1	UJ	0.099	U		
Endosulfan I	8081B	µg/L											0.0085	U
Endosulfan II	8081B	µg/L											0.017	U
Endosulfan Sulfate	8081B	µg/L											0.017	U
Endrin	8081B	µg/L											0.017	U
Endrin Aldehyde	8081B	µg/L											0.085	U
Endrin Ketone	8081B	µg/L											0.017	U
Ethanol	8015C	µg/L												
Ethylbenzene	8260B	µg/L												
Fluoranthene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Fluorene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Formaldehyde	8315A	µg/L											50	U
Gamma-Bhc (Lindane)	8081B	µg/L											0.0085	U
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U		
Heptachlor	8081B	µg/L											0.0085	U
Heptachlor Epoxide	8081B	µg/L											0.0085	U
Hexachloro-1,3-butadiene	8260B	µg/L												
Indeno(1,2,3-cd)pyrene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Iron	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U		
Isopropylbenzene	8260B	µg/L												
Lead	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U		
Lithium	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U		
m,p-Xylene	8260B	µg/L												
Magnesium	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		
Manganese	6010C	mg/L	0.0013	J	0.01	U	0.01	U	0.01	U	0.01	U		
MCPA	8151A	µg/L												
MCPP	8151A	µg/L												
Mercury	7470A	mg/L	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U		
Methanol	8015C	µg/L												
Methoxychlor	8081B	µg/L											0.085	U
Methyl Iodide	8260B	µg/L												
Methyl Tert-Butyl Ether	8260B	µg/L												
Methylene Chloride	8260B	µg/L												
Mirex	8081B	µg/L											0.21	U
Molybdenum	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
Morpholine	8270D SIM	µg/L												
m-Terphenyl	8015B	mg/L												
Naphthalene	8270D SIM	µg/L	0.033	J	0.051	U	0.085		0.086		0.056			
n-Butylbenzene	8260B	µg/L												
Nickel	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
N-Nitrosodimethylamine	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
n-Propylbenzene	8260B	µg/L												
OCDD	1613B	pg/L	19.9	U	21.8	U	19.7	U	19.7	U	19.6	U		
OCDF	1613B	pg/L	19.9	U	21.8	U	19.7	U	19.7	U	19.6	U		
o-Terphenyl	8015B	mg/L												
o-Xylene	8260B	µg/L												
Perchlorate	6850	µg/L											1	U
pH	9040C	pH	5.3		5.1		5.2		5.4		5.8			
Phenanthrene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Phosphorus	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		
Potassium	6010C	mg/L	1	U	1	U	1	U	1	U	1	U		
p-Terphenyl	8015B	mg/L												
Pyrene	8270D SIM	µg/L	0.055	U	0.051	U	0.051	U	0.054	U	0.055	U		
Selenium	6020A	mg/L	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U		
Silver	6020A	mg/L	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U		
Silvex (2,4,5-TP)	8151A	µg/L												
Sodium	6010C	mg/L	2	U	2	U	2	U	2	U	2	U		
Strontium	6020A	mg/L	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Styrene	8260B	µg/L												
TCDD TEQ	1613B	pg/L	0.0906		0.202		0.714		0.867		0.0358			
Technical Toxaphene	8081B	µg/L											2.5	U
tert-Butyl ethyl ether	8260B	µg/L												
tert-Butylbenzene	8260B	µg/L												
Tertiary amyl methyl ether	8260B	µg/L												
Tertiary butyl alcohol	8260B	µg/L												
Tetrachloroethene	8260B	µg/L												
Thallium	6020A	mg/L	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U		
Tin	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U		
Titanium	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
Toluene	8260B	µg/L												
trans-1,2-Dichloroethene	8260B	µg/L												
trans-1,3-Dichloropropene	8260B	µg/L												
Trichloroethene	8260B	µg/L												
Trichlorofluoromethane	8260B	µg/L												
Vanadium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Vinyl Acetate	8260B	µg/L												
Vinyl Chloride	8260B	µg/L												
Zinc	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U		
Zirconium	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		

Notes:
ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

	Sample Name:	EB2-061213		EB1-061913		EB2-061913		EB-073013		EB-111413	
	Location:	5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
	Sample Date:	06/12/2013		06/19/2013		06/19/2013		07/30/2013		11/14/2013	
	Sample Type:	EB		EB		EB		EB		EB	
	Lab:	LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L									5	U
1,1,1-Trichloroethane	8260B	µg/L									5	U
1,1,2,2-Tetrachloroethane	8260B	µg/L									5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L									5	U
1,1,2-Trichloroethane	8260B	µg/L									5	U
1,1-Dichloroethane	8260B	µg/L									5	U
1,1-Dichloroethene	8260B	µg/L									5	U
1,1-Dichloropropene	8260B	µg/L									5	U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,4,6,7,8-HPCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,4,7,8,9-HPCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,4,7,8-HXCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	0.578	J
1,2,3,6,7,8-HXCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,7,8,9-HXCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,7,8-Pentachlorodibenzofuran	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
1,2,3-Trichlorobenzene	8260B	µg/L									5	U
1,2,3-Trichloropropane	8260B	µg/L									5	U
1,2,4-Trichlorobenzene	8260B	µg/L									5	U
1,2,4-Trimethylbenzene	8260B	µg/L									5	U
1,2-Dibromo-3-chloropropane	8260B	µg/L									5	U
1,2-Dibromoethane	8260B	µg/L									5	U
1,2-Dichlorobenzene	8260B	µg/L									5	U
1,2-Dichloroethane	8260B	µg/L									5	U
1,2-Dichloropropane	8260B	µg/L									5	U
1,3,5-Trimethylbenzene	8260B	µg/L									5	U
1,3-Dichlorobenzene	8260B	µg/L									5	U
1,3-Dichloropropane	8260B	µg/L									5	U
1,4-Dichlorobenzene	8260B	µg/L									5	U
1,4-Dioxane	8260B SIM	µg/L									2	U
1-Chlorohexane	8260B	µg/L									5	U
1-Methylnaphthalene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
2,2-Dichloropropane	8260B	µg/L									5	U
2,2-Dichlor-Propionic Acid	8151A	µg/L										
2,3,4,6,7,8-HXCDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
2,3,4,7,8-PECDF	1613B	pg/L	9.76	U	9.72	U	9.7	U	9.86	U	9.78	U
2,3,7,8-TCDD	1613B	pg/L	1.95	U	1.94	U	1.94	U	0.409	J	1.96	U
2,3,7,8-Tetrachlorodibenzofuran	1613B	pg/L	1.95	U	1.94	U	0.25	J	1.97	U	0.366	J
2,4,5-T	8151A	µg/L										
2,4-D	8151A	µg/L										
2,4-DB	8151A	µg/L										
2-Butanone (MEK)	8260B	µg/L									10	U
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L									5	U
2-Chloroethyl Vinyl Ether	8260B	µg/L									10	U
2-Chlorotoluene	8260B	µg/L									5	U
2-Hexanone	8260B	µg/L									10	U
2-Methylnaphthalene	8270D SIM	µg/L	0.051	U	0.011	J	0.011	J	0.052	U	0.052	U
2-Phenylbutane	8260B	µg/L									5	U
2-Propanol	8015C	µg/L									1000	U
4,4'-DDD	8081B	µg/L	0.016	U							0.016	U
4,4'-DDE	8081B	µg/L	0.016	U							0.016	U
4,4'-DDT	8081B	µg/L	0.016	U							0.016	U
4-Chlorotoluene	8260B	µg/L									5	U
4-Methyl-2-pentanone (MIBK)	8260B	µg/L									10	U
Acenaphthene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Acenaphthylene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Acetone	8260B	µg/L									20	U
Acrolein	8260B	µg/L									100	U
Acrylonitrile	8260B	µg/L									20	U
Aldrin	8081B	µg/L	0.0081	U							0.008	U
Alpha-Bhc	8081B	µg/L	0.0081	U							0.008	U
Aluminum	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Anthracene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Antimony	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Aroclor 1016	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1221	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1232	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1242	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1248	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1254	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1260	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1262	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 1268	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 5432	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 5442	8082A	µg/L	0.41	U					0.41	U	0.4	U
Aroclor 5460	8082A	µg/L	0.41	U					0.41	U	0.4	U
Arsenic	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
Barium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.00042	J	0.01	U
Benzene	8260B	µg/L									5	U
Benzo(a)anthracene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Benzo(a)pyrene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Benzo(b)fluoranthene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Benzo(e)pyrene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Benzo(g,h,i)perylene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Benzo(k)fluoranthene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U
Beryllium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Beta-Bhc	8081B	µg/L	0.0081	U							0.0037	J
Bis(2-ethylhexyl)phthalate	8270D SIM	µg/L	1	UJ	1.1	U	1	U	1	U	1	U
Boron	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Bromobenzene	8260B	µg/L									5	U
Bromochloromethane	8260B	µg/L									5	U
Bromodichloromethane	8260B	µg/L									5	U
Bromoform	8260B	µg/L									5	U
Bromomethane	8260B	µg/L									5	U
Butylbenzylphthalate	8270D SIM	µg/L	1	U	1.1	U	1	U	1	U	1	U
Cadmium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Calcium	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Carbon Disulfide	8260B	µg/L									5	U
Carbon Tetrachloride	8260B	µg/L									5	U
Chlordane	8081B	µg/L	0.41	U							0.4	U
Chlorobenzene	8260B	µg/L									5	U
Chloroethane	8260B	µg/L									5	U
Chloroform	8260B	µg/L									5	U
Chloromethane	8260B	µg/L									5	U
Chlorotrifluoroethylene	8260B	µg/L									5	U
Chromium	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U
Chromium (Hexavalent Compounds)	7199	µg/L	10	U							10	U
Chrysene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U

			Sample Name:		EB2-061213		EB1-061913		EB2-061913		EB-073013		EB-111413	
			Location:		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
			Sample Date:		06/12/2013		06/19/2013		06/19/2013		07/30/2013		11/14/2013	
			Sample Type:		EB		EB		EB		EB		EB	
			Lab:		LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
cis-1,2-Dichloroethene	8260B	µg/L											5	U
cis-1,3-Dichloropropene	8260B	µg/L											5	U
Cobalt	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Copper	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Cymene	8260B	µg/L											5	U
Delta-Bhc	8081B	µg/L	0.0081	U									0.008	U
Di isopropyl Ether	8260B	µg/L											5	U
Dibenzo(a,h)anthracene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U	0.052	U
Dibromochloromethane	8260B	µg/L											5	U
Dibromomethane	8260B	µg/L											5	U
Dicamba	8151A	µg/L												
Dichlorodifluoromethane	8260B	µg/L											5	U
Dichlorprop	8151A	µg/L												
Dieldrin	8081B	µg/L	0.016	U									0.016	U
Diethylphthalate	8270D SIM	µg/L	1	U	0.16	J	0.15	J	0.4	J	1	U		
Dimethylphthalate	8270D SIM	µg/L	1	U	1.1	U	1	U	1	U	1	U		
Di-n-butylphthalate	8270D SIM	µg/L	0.13	J	0.17	J	0.17	J	1	U	1	U		
Dinitrobutyl Phenol	8151A	µg/L												
Di-n-octylphthalate	8270D SIM	µg/L	1	UJ	1.1	U	1	U	1	U	1	U		
EFH (C12-C14)	8015M	mg/L	0.099	U	0.1	U	0.1	U	0.098	U	0.099	U		
EFH (C15-C20)	8015M	mg/L	0.099	U	0.1	U	0.1	U	0.098	U	0.099	U		
EFH (C21-C30)	8015M	mg/L	0.099	U	0.1	U	0.1	U	0.098	U	0.099	U		
EFH (C30-C40)	8015M	mg/L	0.49	U	0.5	U	0.5	U	0.49	U	0.49	UJ		
EFH (C8-C11)	8015M	mg/L	0.099	U	0.1	U	0.1	U	0.098	U	0.099	UJ		
Endosulfan I	8081B	µg/L	0.0081	U									0.008	U
Endosulfan II	8081B	µg/L	0.016	U									0.016	U
Endosulfan Sulfate	8081B	µg/L	0.016	U									0.016	U
Endrin	8081B	µg/L	0.016	U									0.016	U
Endrin Aldehyde	8081B	µg/L	0.081	U									0.08	U
Endrin Ketone	8081B	µg/L	0.016	U									0.016	U
Ethanol	8015C	µg/L											1000	U
Ethylbenzene	8260B	µg/L											5	U
Fluoranthene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U	0.052	U
Fluorene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U	0.052	U
Formaldehyde	8315A	µg/L	50	U									50	U
Gamma-Bhc (Lindane)	8081B	µg/L	0.0081	U									0.008	U
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U	50	U
Heptachlor	8081B	µg/L	0.0081	U									0.008	U
Heptachlor Epoxide	8081B	µg/L	0.0081	U									0.008	U
Hexachloro-1,3-butadiene	8260B	µg/L											5	U
Indeno(1,2,3-cd)pyrene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U	0.052	U
Iron	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Isopropylbenzene	8260B	µg/L											5	U
Lead	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U
Lithium	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
m,p-Xylene	8260B	µg/L											5	U
Magnesium	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Manganese	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
MCPA	8151A	µg/L												
MCPP	8151A	µg/L												
Mercury	7470A	mg/L	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Methanol	8015C	µg/L											1000	U
Methoxychlor	8081B	µg/L	0.081	U									0.08	U
Methyl Iodide	8260B	µg/L											5	U
Methyl Tert-Butyl Ether	8260B	µg/L											5	U
Methylene Chloride	8260B	µg/L											5	U
Mirex	8081B	µg/L	0.2	U									0.04	U
Molybdenum	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.0034	J			0.02	U
Morpholine	8270D SIM	µg/L											20	U
m-Terphenyl	8015B	mg/L												
Naphthalene	8270D SIM	µg/L	0.054		0.058		0.057		0.052	U	0.052	U		
n-Butylbenzene	8260B	µg/L											5	U
Nickel	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
N-Nitrosodimethylamine	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U	0.052	U
n-Propylbenzene	8260B	µg/L											5	U
OCDD	1613B	pg/L	19.5	U	19.4	U	19.4	U	19.7	U	19.6	U		
OCDF	1613B	pg/L	19.5	U	19.4	U	19.4	U	19.7	U	19.6	U		
o-Terphenyl	8015B	mg/L												
o-Xylene	8260B	µg/L											5	U
Perchlorate	6850	µg/L	1	U										
pH	9040C	pH	5.8		5.4		5.4		5.8		6.7			
Phenanthrene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U		
Phosphorus	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		
Potassium	6010C	mg/L	1	U	1	U	1	U	1	U	1	U		
p-Terphenyl	8015B	mg/L												
Pyrene	8270D SIM	µg/L	0.051	U	0.053	U	0.052	U	0.052	U	0.052	U		
Selenium	6020A	mg/L	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U		
Silver	6020A	mg/L	0.00062	J	0.001	U	0.001	U	0.001	U	0.001	U		
Silvex (2,4,5-TP)	8151A	µg/L												
Sodium	6010C	mg/L	2	U	2	U	2	U	2	U	2	U		
Strontium	6020A	mg/L	0.00053	J	0.002	U	0.002	U	0.002	U	0.002	U		
Styrene	8260B	µg/L											5	U
TCDD TEQ	1613B	pg/L	0.0319		0.0059		0.0172		0.212		0.227			
Technical Toxaphene	8081B	µg/L	2.4	U									0.8	U
tert-Butyl ethyl ether	8260B	µg/L											5	U
tert-Butylbenzene	8260B	µg/L											5	U
Tertiary amyl methyl ether	8260B	µg/L											5	U
Tertiary butyl alcohol	8260B	µg/L											50	U
Tetrachloroethene	8260B	µg/L											5	U
Thallium	6020A	mg/L	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U		
Tin	6010C	mg/L	0.04	U	0.0031	J	0.04	U	0.04	U	0.04	U		
Titanium	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U		
Toluene	8260B	µg/L											5	U
trans-1,2-Dichloroethene	8260B	µg/L											5	U
trans-1,3-Dichloropropene	8260B	µg/L											5	U
Trichloroethene	8260B	µg/L											5	U
Trichlorofluoromethane	8260B	µg/L											5	U
Vanadium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Vinyl Acetate	8260B	µg/L											10	U
Vinyl Chloride	8260B	µg/L											5	U
Zinc	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.0027	J			0.04	U
Zirconium	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		

Notes:
ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

			Sample Name:		EB-111913		EB1-112613		EB2-112613		EB-120213		EB-120313	
			Location:		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
			Sample Date:		11/19/2013		11/26/2013		11/26/2013		12/02/2013		12/03/2013	
			Sample Type:		EB		EB		EB		EB		EB	
			Lab:		LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L	5	U								
1,1,1-Trichloroethane	8260B	µg/L	5	U								
1,1,2,2-Tetrachloroethane	8260B	µg/L	5	U								
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L	5	U								
1,1,2-Trichloroethane	8260B	µg/L	5	U								
1,1-Dichloroethane	8260B	µg/L	5	U								
1,1-Dichloroethene	8260B	µg/L	5	U								
1,1-Dichloropropene	8260B	µg/L	5	U								
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,4,6,7,8-HPCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,4,7,8,9-HPCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.69	U	11.1	U	10.6	U	0.36	J		
1,2,3,4,7,8-HXCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,6,7,8-HXCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,7,8,9-HXCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,7,8-Pentachlorodibenzofuran	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1613B	pg/L	9.69	U	0.438	J	0.622	J	11.3	U		
1,2,3-Trichlorobenzene	8260B	µg/L	5	U								
1,2,3-Trichloropropane	8260B	µg/L	5	U								
1,2,4-Trichlorobenzene	8260B	µg/L	5	U								
1,2,4-Trimethylbenzene	8260B	µg/L	5	U								
1,2-Dibromo-3-chloropropane	8260B	µg/L	5	U								
1,2-Dibromoethane	8260B	µg/L	5	U								
1,2-Dichlorobenzene	8260B	µg/L	5	U								
1,2-Dichloroethane	8260B	µg/L	5	U								
1,2-Dichloropropane	8260B	µg/L	5	U								
1,3,5-Trimethylbenzene	8260B	µg/L	5	U								
1,3-Dichlorobenzene	8260B	µg/L	5	U								
1,3-Dichloropropane	8260B	µg/L	5	U								
1,4-Dichlorobenzene	8260B	µg/L	5	U								
1,4-Dioxane	8260B SIM	µg/L	2	U								
1-Chlorohexane	8260B	µg/L	5	U								
1-Methylnaphthalene	8270D SIM	µg/L	0.053	U	0.01	J	0.055	U			0.05	U
2,2-Dichloropropane	8260B	µg/L	5	U								
2,2-Dichlor-Propionic Acid	8151A	µg/L	1.2	U								
2,3,4,6,7,8-HXCDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
2,3,4,7,8-PECDF	1613B	pg/L	9.69	U	11.1	U	10.6	U	11.3	U		
2,3,7,8-TCDD	1613B	pg/L	1.94	U	0.702	J	0.739	J	2.26	U		
2,3,7,8-Tetrachlorodibenzofuran	1613B	pg/L	1.94	U	2.23	U	2.12	U	2.26	U		
2,4,5-T	8151A	µg/L	0.048	U								
2,4-D	8151A	µg/L	0.48	U								
2,4-DB	8151A	µg/L	0.96	U								
2-Butanone (MEK)	8260B	µg/L	10	U								
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L	5	U								
2-Chloroethyl Vinyl Ether	8260B	µg/L	10	U								
2-Chlorotoluene	8260B	µg/L	5	U								
2-Hexanone	8260B	µg/L	10	U								
2-Methylnaphthalene	8270D SIM	µg/L	0.053	U	0.012	J	0.011	J			0.05	U
2-Phenylbutane	8260B	µg/L	5	U								
2-Propanol	8015C	µg/L										
4,4'-DDD	8081B	µg/L	0.017	U								
4,4'-DDE	8081B	µg/L	0.017	U								
4,4'-DDT	8081B	µg/L	0.017	U								
4-Chlorotoluene	8260B	µg/L	5	U								
4-Methyl-2-pentanone (MIBK)	8260B	µg/L	10	U								
Acenaphthene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Acenaphthylene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Acetone	8260B	µg/L	20	U								
Acrolein	8260B	µg/L	100	U								
Acrylonitrile	8260B	µg/L	20	U								
Aldrin	8081B	µg/L	0.0087	U								
Alpha-Bhc	8081B	µg/L	0.0087	U								
Aluminum	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U		
Anthracene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Antimony	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U		
Aroclor 1016	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1221	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1232	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1242	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1248	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1254	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1260	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1262	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 1268	8082A	µg/L	0.43	U	0.41	UJ	0.44	UJ	0.5	U		
Aroclor 5432	8082A	µg/L	0.43	U	0.41	U	0.44	U	0.5	U		
Aroclor 5442	8082A	µg/L	0.43	U	0.41	U	0.44	U	0.5	U		
Aroclor 5460	8082A	µg/L	0.43	U	0.41	U	0.44	U	0.5	U		
Arsenic	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U		
Barium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
Benzene	8260B	µg/L	5	U								
Benzo(a)anthracene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Benzo(a)pyrene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Benzo(b)fluoranthene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.012	J
Benzo(e)pyrene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Benzo(g,h,i)perylene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.059	
Benzo(k)fluoranthene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.011	J
Beryllium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
Beta-Bhc	8081B	µg/L	0.0087	U								
Bis(2-ethylhexyl)phthalate	8270D SIM	µg/L	1.1	U	1	UJ	1.1	U			1	UJ
Boron	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U		
Bromobenzene	8260B	µg/L	5	U								
Bromochloromethane	8260B	µg/L	5	U								
Bromodichloromethane	8260B	µg/L	5	U								
Bromoform	8260B	µg/L	5	U								
Bromomethane	8260B	µg/L	5	U								
Butylbenzylphthalate	8270D SIM	µg/L	1.1	U	1	U	1.1	U			1	U
Cadmium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
Calcium	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U		
Carbon Disulfide	8260B	µg/L	5	U								
Carbon Tetrachloride	8260B	µg/L	5	U								
Chlordane	8081B	µg/L	0.43	U								
Chlorobenzene	8260B	µg/L	5	U								
Chloroethane	8260B	µg/L	5	U								
Chloroform	8260B	µg/L	5	U								
Chloromethane	8260B	µg/L	5	U								
Chlorotrifluoroethylene	8260B	µg/L	5	U								
Chromium	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U		
Chromium (Hexavalent Compounds)	7199	µg/L	10	U			10	U				
Chrysene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U

			Sample Name:		EB-111913		EB1-112613		EB2-112613		EB-120213		EB-120313	
			Location:		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB		5A_DG_EB	
			Sample Date:		11/19/2013		11/26/2013		11/26/2013		12/02/2013		12/03/2013	
			Sample Type:		EB		EB		EB		EB		EB	
			Lab:		LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
cis-1,2-Dichloroethene	8260B	µg/L	5	U								
cis-1,3-Dichloropropene	8260B	µg/L	5	U								
Cobalt	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
Copper	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U		
Cymene	8260B	µg/L	5	U								
Delta-Bhc	8081B	µg/L	0.0087	U								
Di isopropyl Ether	8260B	µg/L	5	U								
Dibenzo(a,h)anthracene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.059	
Dibromochloromethane	8260B	µg/L	5	U								
Dibromomethane	8260B	µg/L	5	U								
Dicamba	8151A	µg/L	0.29	U								
Dichlorodifluoromethane	8260B	µg/L	5	U								
Dichlorprop	8151A	µg/L	0.48	U								
Dieldrin	8081B	µg/L	0.017	U								
Diethylphthalate	8270D SIM	µg/L	0.26	J	0.44	J	0.35	J			0.49	J
Dimethylphthalate	8270D SIM	µg/L	1.1	U	1	U	1.1	U			1	U
Di-n-butylphthalate	8270D SIM	µg/L	1.1	U	0.24	J	1.1	U			0.18	J
Dinitrobutyl Phenol	8151A	µg/L	0.48	U								
Di-n-octylphthalate	8270D SIM	µg/L	1.1	U	1	U	1.1	U			1	U
EFH (C12-C14)	8015M	mg/L	0.096	U	0.11	U	0.11	U	0.11	U		
EFH (C15-C20)	8015M	mg/L	0.096	U	0.11	U	0.11	U	0.11	U		
EFH (C21-C30)	8015M	mg/L	0.096	U	0.11	U	0.11	U	0.11	U		
EFH (C30-C40)	8015M	mg/L	0.48	UJ	0.54	U	0.53	U	0.53	UJ		
EFH (C8-C11)	8015M	mg/L	0.096	UJ	0.11	U	0.11	U	0.11	UJ		
Endosulfan I	8081B	µg/L	0.0087	U								
Endosulfan II	8081B	µg/L	0.017	U								
Endosulfan Sulfate	8081B	µg/L	0.017	U								
Endrin	8081B	µg/L	0.017	UJ								
Endrin Aldehyde	8081B	µg/L	0.087	UJ								
Endrin Ketone	8081B	µg/L	0.017	UJ								
Ethanol	8015C	µg/L										
Ethylbenzene	8260B	µg/L	5	U								
Fluoranthene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Fluorene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Formaldehyde	8315A	µg/L	50	U			50	U				
Gamma-Bhc (Lindane)	8081B	µg/L	0.0087	U								
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U		
Heptachlor	8081B	µg/L	0.0087	U								
Heptachlor Epoxide	8081B	µg/L	0.0087	U								
Hexachloro-1,3-butadiene	8260B	µg/L	5	U								
Indeno(1,2,3-cd)pyrene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.054	
Iron	6010C	mg/L	0.4	U	0.4	U	0.4	U	0.4	U		
Isopropylbenzene	8260B	µg/L	5	U								
Lead	6010C	mg/L	0.03	U	0.03	U	0.03	U	0.03	U		
Lithium	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U		
m,p-Xylene	8260B	µg/L	5	U								
Magnesium	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U		
Manganese	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
MCPA	8151A	µg/L	190	U								
MCPP	8151A	µg/L	190	U								
Mercury	7470A	mg/L	0.0002	U	0.0002	U	0.0002	U	0.0002	U		
Methanol	8015C	µg/L										
Methoxychlor	8081B	µg/L	0.087	U								
Methyl Iodide	8260B	µg/L	5	U								
Methyl Tert-Butyl Ether	8260B	µg/L	5	U								
Methylene Chloride	8260B	µg/L	5	U								
Mirex	8081B	µg/L	0.043	U								
Molybdenum	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U		
Morpholine	8270D SIM	µg/L	20	U			20	U				
m-Terphenyl	8015B	mg/L	0.0049	U	0.0052	U						
Naphthalene	8270D SIM	µg/L	0.053	U	0.031	J	0.055	U			0.05	U
n-Butylbenzene	8260B	µg/L	5	U								
Nickel	6010C	mg/L	0.02	U	0.02	U	0.0018	J	0.02	U		
N-Nitrosodimethylamine	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
n-Propylbenzene	8260B	µg/L	5	U								
OCDD	1613B	pg/L	19.4	U	22.3	U	21.2	U	22.6	U		
OCDF	1613B	pg/L	19.4	U	22.3	U	21.2	U	22.6	U		
o-Terphenyl	8015B	mg/L	0.0049	U	0.0052	U						
o-Xylene	8260B	µg/L	5	U								
Perchlorate	6850	µg/L										
pH	9040C	pH	6.7		7		6.5		5.9			
Phenanthrene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Phosphorus	6010C	mg/L	0.2	U	0.2	U	0.2	U	0.2	U		
Potassium	6010C	mg/L	1	U	1	U	0.109	J	1	U		
p-Terphenyl	8015B	mg/L	0.0049	U	0.0052	U						
Pyrene	8270D SIM	µg/L	0.053	U	0.05	U	0.055	U			0.05	U
Selenium	6020A	mg/L	0.004	U	0.004	U	0.004	U	0.004	U		
Silver	6020A	mg/L	0.001	U	0.001	U	0.001	U	0.001	U		
Silvex (2,4,5-TP)	8151A	µg/L	0.048	U								
Sodium	6010C	mg/L	2	U	2	U	2	U	2	U		
Strontium	6020A	mg/L	0.002	U	0.002	U	0.002	U	0.002	U		
Styrene	8260B	µg/L	5	U								
TCDD TEQ	1613B	pg/L	0.0902		0.004		0.638		0.0262			
Technical Toxaphene	8081B	µg/L	0.87	U								
tert-Butyl ethyl ether	8260B	µg/L	5	U								
tert-Butylbenzene	8260B	µg/L	5	U								
Tertiary amyl methyl ether	8260B	µg/L	5	U								
Tertiary butyl alcohol	8260B	µg/L	50	U								
Tetrachloroethene	8260B	µg/L	5	U								
Thallium	6020A	mg/L	0.001	U	0.001	U	0.001	U	0.001	U		
Tin	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U		
Titanium	6010C	mg/L	0.02	U	0.02	U	0.02	U	0.02	U		
Toluene	8260B	µg/L	5	U								
trans-1,2-Dichloroethene	8260B	µg/L	5	U								
trans-1,3-Dichloropropene	8260B	µg/L	5	U								
Trichloroethene	8260B	µg/L	5	U								
Trichlorofluoromethane	8260B	µg/L	5	U								
Vanadium	6010C	mg/L	0.01	U	0.01	U	0.01	U	0.01	U		
Vinyl Acetate	8260B	µg/L	10	U								
Vinyl Chloride	8260B	µg/L	5	U								
Zinc	6010C	mg/L	0.04	U	0.04	U	0.04	U	0.04	U		
Zirconium	6010C	mg/L	0.1	U	0.1	U	0.1	U	0.1	U		

Notes:
ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

	Sample Name:	FB-041113		FB-041613	
	Location:	FIELD BLANK		FIELD BLANK	
	Sample Date:	04/11/2013		04/16/2013	
	Sample Type:	FB		FB	
	Lab:	LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L	5	U	5	U
1,1,1-Trichloroethane	8260B	µg/L	5	U	5	U
1,1,2,2-Tetrachloroethane	8260B	µg/L	5	U	5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L	5	U	5	U
1,1,2-Trichloroethane	8260B	µg/L	5	U	5	U
1,1'-Biphenyl	8270D	µg/L	1	U	1	U
1,1-Dichloroethane	8260B	µg/L	5	U	5	U
1,1-Dichloroethene	8260B	µg/L	5	U	5	U
1,1-Dichloropropene	8260B	µg/L	5	U	5	U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.71	U
1,2,3,4,6,7,8-HPCDF	1613B	pg/L	9.76	U	9.71	U
1,2,3,4,7,8,9-HPCDF	1613B	pg/L	9.76	U	9.71	U
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	0.125	J	9.71	U
1,2,3,4,7,8-HXCDF	1613B	pg/L	9.76	U	0.257	J
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.71	U
1,2,3,6,7,8-HXCDF	1613B	pg/L	9.76	U	9.71	U
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.71	U
1,2,3,7,8,9-HXCDF	1613B	pg/L	9.76	U	9.71	U
1,2,3,7,8-Pentachlorodibenzofuran	1613B	pg/L	9.76	U	9.71	U
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1613B	pg/L	9.76	U	9.71	U
1,2,3-Trichlorobenzene	8260B	µg/L	5	U	5	U
1,2,3-Trichloropropane	8260B	µg/L	5	U	5	U
1,2,4-Trichlorobenzene	8260B	µg/L	5	U	5	U
1,2,4-Trichlorobenzene	8270D	µg/L	1	U	1	U
1,2,4-Trimethylbenzene	8260B	µg/L	5	U	5	U
1,2-Dibromo-3-chloropropane	8260B	µg/L	5	U	5	U
1,2-Dibromoethane	8260B	µg/L	5	U	5	U
1,2-Dichlorobenzene	8260B	µg/L	5	U	5	U
1,2-Dichlorobenzene	8270D	µg/L	1	U	1	U
1,2-Dichloroethane	8260B	µg/L	5	U	5	U
1,2-Dichloropropane	8260B	µg/L	5	U	5	U
1,2-Diphenylhydrazine	8270D	µg/L	1	U	1	U
1,3,5-Trimethylbenzene	8260B	µg/L	5	U	5	U
1,3,5-Trinitrobenzene	8330A	µg/L	0.6	UJ	0.6	U
1,3-Dichlorobenzene	8260B	µg/L	5	U	5	U
1,3-Dichlorobenzene	8270D	µg/L	1	U	1	U
1,3-Dichloropropane	8260B	µg/L	5	U	5	U
1,4-Dichlorobenzene	8260B	µg/L	5	U	5	U
1,4-Dichlorobenzene	8270D	µg/L	1	U	1	U
1,4-Dioxane	8260B SIM	µg/L	2	U	2	U
1-Chlorohexane	8260B	µg/L	5	U	5	U
1-Methylnaphthalene	8270D	µg/L	0.5	U	0.5	U
1-Methylnaphthalene	8270D SIM	µg/L	0.019	J	0.052	U
2,2-Dichloropropane	8260B	µg/L	5	U	5	U
2,2-Dichlor-Propionic Acid	8151A	µg/L	1.2	U	1.2	UJ
2,3,4,6,7,8-HXCDF	1613B	pg/L	9.76	U	9.71	U
2,3,4,7,8-PECDF	1613B	pg/L	9.76	U	9.71	U
2,3,7,8-TCDD	1613B	pg/L	1.95	U	1.94	U
2,3,7,8-Tetrachlorodibenzofuran	1613B	pg/L	1.95	U	1.94	U
2,4,5-T	8151A	µg/L	0.049	U	0.049	UJ
2,4,5-Trichlorophenol	8270D	µg/L	1	U	1	U
2,4,6-Trichlorophenol	8270D	µg/L	1	U	1	U
2,4,6-Trinitrotoluene	8330A	µg/L	0.6	UJ	0.6	U
2,4-D	8151A	µg/L	0.49	U	0.49	U
2,4-DB	8151A	µg/L	0.98	U	0.98	U
2,4-Diamino-6-nitrotoluene	8330A	µg/L	0.6	U	0.6	U
2,4-Dichlorophenol	8270D	µg/L	1	U	1	U
2,4-Dimethylphenol	8270D	µg/L	1	U	1	U
2,4-Dinitrophenol	8270D	µg/L	31	U	31	U
2,4-Dinitrotoluene	8330A	µg/L	0.6	UJ	0.6	U
2,6-Diamino-4-nitrotoluene	8330A	µg/L	0.6	U	0.6	U
2,6-Dichlorophenol	8270D	µg/L	1	U	1	U
2,6-Dinitrotoluene	8330A	µg/L	0.6	U	0.6	U
2-Amino-4,6-Dinitrotoluene	8330A	µg/L	0.6	UJ	0.6	U
2-Butanone (MEK)	8260B	µg/L	10	U	10	U
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L	5	U	5	U
2-Chloroethyl Vinyl Ether	8260B	µg/L	10	U	10	U
2-Chloronaphthalene	8270D	µg/L	1	U	1	U
2-Chlorophenol	8270D	µg/L	1	U	1	U
2-Chlorotoluene	8260B	µg/L	5	U	5	U
2-Hexanone	8260B	µg/L	10	U	10	U
2-Methylnaphthalene	8270D	µg/L	0.5 0.5	U U	0.5 0.5	U U
2-Methylnaphthalene	8270D SIM	µg/L	0.024	J	0.012	J
2-Methylphenol	8270D	µg/L	1	U	1	U
2-Nitroaniline	8270D	µg/L	1	U	1	U
2-Nitrophenol	8270D	µg/L	1	U	1	U
2-Nitrotoluene	8330A	µg/L	0.6	UJ	0.6	U
2-Phenylbutane	8260B	µg/L	5	U	5	U
2-Propanol	8015C	µg/L	1000	UJ	1000	UJ
3,3'-Dichlorobenzidine	8270D	µg/L	5	U	5	U
3,5-Dimethylphenol	8270D	µg/L	10	U	10	U
3-Nitroaniline	8270D	µg/L	1	U	1	U
3-Nitrotoluene	8330A	µg/L	1.2	UJ	1.2	U
4,4'-DDD	8081B	µg/L	0.016	U	0.017	U
4,4'-DDE	8081B	µg/L	0.016	U	0.017	U
4,4'-DDT	8081B	µg/L	0.016	U	0.017	U
4,6-Dinitro-2-methylphenol	8270D	µg/L	15	U	16	U
4-Amino-2,6-Dinitrotoluene	8330A	µg/L	0.6	U	0.6	U
4-Bromophenyl-phenylether	8270D	µg/L	1	U	1	U
4-Chloro-3-methylphenol	8270D	µg/L	1	U	1	U
4-Chloroaniline	8270D	µg/L	1	U	1	U
4-Chlorophenyl-phenylether	8270D	µg/L	1	U	1	U
4-Chlorotoluene	8260B	µg/L	5	U	5	U
4-Methyl-2-pentanone (MIBK)	8260B	µg/L	10	U	10	U
4-Methylphenol	8270D	µg/L	1	U	1	U
4-Nitroaniline	8270D	µg/L	1	U	1	U
4-Nitrophenol	8270D	µg/L	31	U	31	U
4-Nitrotoluene	8330A	µg/L	1.2	UJ	1.2	U
Acenaphthene	8270D	µg/L	0.5 0.5	U U	0.5 0.5	U U
Acenaphthene	8270D SIM	µg/L	0.051	U	0.052	U
Acenaphthylene	8270D	µg/L	0.5 0.5	U U	0.5 0.5	U U
Acenaphthylene	8270D SIM	µg/L	0.051	U	0.052	U
Acetone	8260B	µg/L	20	U	20	U
Acrolein	8260B	µg/L	100	U	100	U
Acrylonitrile	8260B	µg/L	20	U	20	U
Aldrin	8081B	µg/L	0.0081	U	0.0086	U
Alpha-Bhc	8081B	µg/L	0.0081	U	0.0086	U
Aluminum	6010C	mg/L	0.4	U	0.4	U

			Sample Name:		FB-041113		FB-041613	
			Location:		FIELD BLANK		FIELD BLANK	
			Sample Date:		04/11/2013		04/16/2013	
			Sample Type:		FB		FB	
			Lab:		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer
Aniline	8270D	µg/L	1	U	1	U
Anthracene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Anthracene	8270D SIM	µg/L	0.051	U	0.052	U
Antimony	6010C	mg/L	0.04	U	0.04	U
Aroclor 1016	8082A	µg/L	0.4	U	0.43	U
Aroclor 1221	8082A	µg/L	0.4	U	0.43	U
Aroclor 1232	8082A	µg/L	0.4	U	0.43	U
Aroclor 1242	8082A	µg/L	0.4	U	0.43	U
Aroclor 1248	8082A	µg/L	0.4	U	0.43	U
Aroclor 1254	8082A	µg/L	0.4	U	0.43	U
Aroclor 1260	8082A	µg/L	0.4	U	0.43	U
Aroclor 1262	8082A	µg/L	0.4	U	0.43	U
Aroclor 1268	8082A	µg/L	0.4	U	0.43	U
Aroclor 5432	8082A	µg/L	0.4	U	0.43	U
Aroclor 5442	8082A	µg/L	0.4	U	0.43	U
Aroclor 5460	8082A	µg/L	0.4	U	0.43	U
Arsenic	6010C	mg/L	0.04	U	0.04	U
Barium	6010C	mg/L	0.01	U	0.01	U
Benzene	8260B	µg/L	5	U	5	U
Benzidine	8270D	µg/L	61	U	62	U
Benzo(a)anthracene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Benzo(a)anthracene	8270D SIM	µg/L	0.051	U	0.052	U
Benzo(a)pyrene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Benzo(a)pyrene	8270D SIM	µg/L	0.051	U	0.052	U
Benzo(b)fluoranthene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Benzo(b)fluoranthene	8270D SIM	µg/L	0.051	U	0.052	U
Benzo(e)pyrene	8270D SIM	µg/L	0.051	U	0.052	U
Benzo(g,h,i)perylene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Benzo(g,h,i)perylene	8270D SIM	µg/L	0.051	U	0.052	U
Benzo(k)fluoranthene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Benzo(k)fluoranthene	8270D SIM	µg/L	0.051	U	0.052	U
Benzoic Acid	8270D	µg/L	15	UJ	16	UJ
Benzyl Alcohol	8270D	µg/L	15	U	16	U
Beryllium	6010C	mg/L	0.01	U	0.01	U
Beta-Bhc	8081B	µg/L	0.0081	U	0.0086	U
bis(2-chloroethoxy)methane	8270D	µg/L	1	U	1	U
bis(2-chloroethyl) ether	8270D	µg/L	1	U	1	U
bis(2-chloroisopropyl) ether	8270D	µg/L	1	U	1	U
Bis(2-ethylhexyl)phthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Bis(2-ethylhexyl)phthalate	8270D SIM	µg/L	1	U	1	U
Boron	6010C	mg/L	0.1	U	0.1	U
Bromide	300.0	mg/L	0.5	U	0.5	U
Bromobenzene	8260B	µg/L	5	U	5	U
Bromochloromethane	8260B	µg/L	5	U	5	U
Bromodichloromethane	8260B	µg/L	5	U	5	U
Bromoform	8260B	µg/L	5	U	5	U
Bromomethane	8260B	µg/L	5	U	5	U
Butylbenzylphthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Butylbenzylphthalate	8270D SIM	µg/L	1	U	1	U
Cadmium	6010C	mg/L	0.01	U	0.01	U
Calcium	6010C	mg/L	0.4	U	0.4	U
Carbazole	8270D	µg/L	1	U	1	U
Carbon Disulfide	8260B	µg/L	5	U	5	U
Carbon Tetrachloride	8260B	µg/L	5	U	5	U
Chlordane	8081B	µg/L	0.4	U	0.43	U
Chloride	300.0	mg/L	0.4	U	0.4	U
Chlorobenzene	8260B	µg/L	5	U	5	U
Chloroethane	8260B	µg/L	5	U	5	U
Chloroform	8260B	µg/L	5	U	3	J
Chloromethane	8260B	µg/L	5	U	5	U
Chlorotrifluoroethylene	8260B	µg/L	5	U	5	U
Chromium	6010C	mg/L	0.03	U	0.03	U
Chromium (Hexavalent Compounds)	7199	µg/L	10	U	10	U
Chrysene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Chrysene	8270D SIM	µg/L	0.051	U	0.052	U
cis-1,2-Dichloroethene	8260B	µg/L	5	U	5	U
cis-1,3-Dichloropropene	8260B	µg/L	5	U	5	U
Cobalt	6010C	mg/L	0.01	U	0.01	U
Copper	6010C	mg/L	0.02	U	0.02	U
Cyanide	9012B	mg/L	0.01	U	0.01	U
Cymene	8260B	µg/L	5	U	5	U
Delta-Bhc	8081B	µg/L	0.0081	U	0.0086	U
Di isopropyl Ether	8260B	µg/L	5	U	5	U
Dibenzo(a,h)anthracene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Dibenzo(a,h)anthracene	8270D SIM	µg/L	0.051	U	0.052	U
Dibenzofuran	8270D	µg/L	1	U	1	U
Dibromochloromethane	8260B	µg/L	5	U	5	U
Dibromomethane	8260B	µg/L	5	U	5	U
Dicamba	8151A	µg/L	0.29	U	0.29	UJ
Dichlorodifluoromethane	8260B	µg/L	5	U	5	U
Dichlorprop	8151A	µg/L	0.49	U	0.49	UJ
Dieldrin	8081B	µg/L	0.016	U	0.017	U
Diethylene Glycol	8015C	mg/L	10	UJ	10	U
Diethylphthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Diethylphthalate	8270D SIM	µg/L	0.18	J	1	U
Dimethylphthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Dimethylphthalate	8270D SIM	µg/L	1	U	1	U
Di-n-butylphthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Di-n-butylphthalate	8270D SIM	µg/L	0.17	J	0.11	J
Dinitrobutyl Phenol	8151A	µg/L	0.49	U	0.49	UJ
Di-n-octylphthalate	8270D	µg/L	5	U	5	U
			5	U	5	U
Di-n-octylphthalate	8270D SIM	µg/L	1	UJ	1	UJ
Diphenylamine	8270D	µg/L	5	U	5	U
EFH (C12-C14)	8015M	mg/L	0.57	U	0.59	U
EFH (C15-C20)	8015M	mg/L	0.57	U	0.59	U
EFH (C21-C30)	8015M	mg/L	0.57	U	0.59	U
EFH (C30-C40)	8015M	mg/L	0.57	U	0.59	UJ

			Sample Name:		FB-041113	
			Location:		FIELD BLANK	
			Sample Date:		04/11/2013	
			Sample Type:		FB	
			Lab:		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer
EFH (C8-C11)	8015M	mg/L	0.57	UJ	0.59	U
Endosulfan I	8081B	µg/L	0.0081	U	0.0086	U
Endosulfan II	8081B	µg/L	0.016	U	0.017	U
Endosulfan Sulfate	8081B	µg/L	0.016	U	0.017	U
Endrin	8081B	µg/L	0.016	U	0.017	U
Endrin Aldehyde	8081B	µg/L	0.081	U	0.086	U
Endrin Ketone	8081B	µg/L	0.016	U	0.017	U
Ethanol	8015C	µg/L	1000	UJ	1000	UJ
Ethylbenzene	8260B	µg/L	5	U	5	U
Ethylene Glycol	8015C	mg/L	10	UJ	10	U
Fluoranthene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Fluoranthene	8270D SIM	µg/L	0.051	U	0.052	U
Fluorene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Fluorene	8270D SIM	µg/L	0.051	U	0.052	U
Fluoride	300.0	mg/L	0.1	U	0.1	U
Formaldehyde	8315A	µg/L	50	U	50	U
Gamma-Bhc (Lindane)	8081B	µg/L	0.0081	U	0.0086	U
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U
Heptachlor	8081B	µg/L	0.0081	U	0.0086	U
Heptachlor Epoxide	8081B	µg/L	0.0081	U	0.0086	U
Hexachloro-1,3-butadiene	8260B	µg/L	5	U	5	U
Hexachlorobenzene	8270D	µg/L	0.5	U	0.5	U
Hexachlorobutadiene	8270D	µg/L	1	U	1	U
Hexachlorocyclopentadiene	8270D	µg/L	15	U	16	U
Hexachloroethane	8270D	µg/L	5	U	5	U
HMX	8330A	µg/L	2	UJ	2	U
Indeno(1,2,3-cd)pyrene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Indeno(1,2,3-cd)pyrene	8270D SIM	µg/L	0.051	U	0.052	U
Iron	6010C	mg/L	0.4	U	0.4	U
Isophorone	8270D	µg/L	1	U	1	U
Isopropylbenzene	8260B	µg/L	5	U	5	U
Lead	6010C	mg/L	0.03	U	0.03	U
Lithium	6010C	mg/L	0.04	U	0.04	U
m,p-Xylene	8260B	µg/L	5	U	5	U
Magnesium	6010C	mg/L	0.2	U	0.2	U
Manganese	6010C	mg/L	0.01	U	0.01	U
MCPA	8151A	µg/L	200	U	200	U
MCPP	8151A	µg/L	200	U	200	UJ
M-Dinitrobenzene	8330A	µg/L	0.6	UJ	0.6	U
Mercury	7470A	mg/L	0.0002	U	0.0002	U
Methanol	8015C	µg/L	1000	UJ	1000	UJ
Methoxychlor	8081B	µg/L	0.081	U	0.086	U
Methyl Iodide	8260B	µg/L	5	U	5	U
Methyl Tert-Butyl Ether	8260B	µg/L	5	U	5	U
Methylene Chloride	8260B	µg/L	2	J	18	
Mirex	8081B	µg/L	0.2	U	0.22	U
Molybdenum	6010C	mg/L	0.02	U	0.02	U
m-Terphenyl	8015B	mg/L	0.0048	U	0.0049	U
Naphthalene	8270D	µg/L	0.2	J	0.5	U
			0.2	J	0.5	U
Naphthalene	8270D SIM	µg/L	0.17		0.052	U
n-Butylbenzene	8260B	µg/L	5	U	5	U
Nickel	6010C	mg/L	0.02	U	0.02	U
Nitrate	300.0	mg/L	0.1	U	0.1	U
Nitrite-NO2	300.0	mg/L	0.1	U	0.1	U
Nitrobenzene	8270D	µg/L	1	U	1	U
Nitrobenzene	8330A	µg/L	0.6	U	0.6	U
Nitroglycerin	8330A	µg/kg	100000000	UJ	100000000	U
N-Nitrosodimethylamine	8270D	µg/L	5	U	5	U
			5	U	5	U
N-Nitrosodimethylamine	8270D SIM	µg/L	0.051	U	0.052	U
N-Nitroso-di-n-propylamine	8270D	µg/L	1	U	1	U
N-Nitrosodiphenylamine	8270D	µg/L	1	U	1	U
n-Propylbenzene	8260B	µg/L	5	U	5	U
OCDD	1613B	pg/L	19.5	U	19.4	U
OCDF	1613B	pg/L	19.5	U	19.4	U
Orthophosphate	300.0	mg/L	0.5	U	0.5	U
o-Terphenyl	8015B	mg/L	0.0048	U	0.0049	U
o-Xylene	8260B	µg/L	5	U	5	U
Pentachlorophenol	8270D	µg/L	5	U	5	U
Perchlorate	6850	µg/L	1	U	1	U
PETN	8330A	µg/kg	100000000	UJ	100000000	U
pH	9040C	pH	7.5		5.7	
Phenanthrene	8270D	µg/L	0.5	U	0.5	U
			0.5	U	0.5	U
Phenanthrene	8270D SIM	µg/L	0.051	U	0.052	U
Phenol	8270D	µg/L	1	U	1	U
Phosphorus	6010C	mg/L	0.2	U	0.2	U
Potassium	6010C	mg/L	1	U	1	U
Propylene Glycol	8015C	mg/L	10	UJ	10	U
p-Terphenyl	8015B	mg/L	0.0048	U	0.0049	U
Pyrene	8270D	µg/L	0.5	U	0.5	U
Pyrene	8270D SIM	µg/L	0.051	U	0.052	U
Pyridine	8270D	µg/L	5	U	5	U
RDX	8330A	µg/L	0.6	UJ	0.6	U
Selenium	6020A	mg/L	0.004	U	0.004	U
Silver	6020A	mg/L	0.001	U	0.001	U
Silvex (2,4,5-TP)	8151A	µg/L	0.049	U	0.049	U
Sodium	6010C	mg/L	2	U	2	U
Strontium	6020A	mg/L	0.002	U	0.002	U
Styrene	8260B	µg/L	5	U	5	U
Sulfate	300.0	mg/L	1	U	1	U
TCDD TEQ	1613B	pg/L	0.082		0.0354	
Technical Toxaphene	8081B	µg/L	2.4	U	2.6	U
tert-Butyl ethyl ether	8260B	µg/L	5	U	5	U
tert-Butylbenzene	8260B	µg/L	5	U	5	U
Tertiary amyl methyl ether	8260B	µg/L	5	U	5	U
Tertiary butyl alcohol	8260B	µg/L	50	U	50	U
Tetrachloroethene	8260B	µg/L	5	U	5	U
Tetryl	8330A	µg/L	0.6	U	0.6	U
Thallium	6020A	mg/L	0.001	U	0.001	U
Tin	6010C	mg/L	0.04	U	0.0029	J
Titanium	6010C	mg/L	0.02	U	0.02	U
Toluene	8260B	µg/L	5	U	5	U
trans-1,2-Dichloroethene	8260B	µg/L	5	U	5	U
trans-1,3-Dichloropropene	8260B	µg/L	5	U	5	U
Trichloroethene	8260B	µg/L	5	U	5	U
Trichlorofluoromethane	8260B	µg/L	5	U	5	U

			Sample Name:		FB-041613	
			Location:		FIELD BLANK	
			Sample Date:		04/16/2013	
			Sample Type:		FB	
			Lab:		LL	

		Sample Name:	FB-041113		FB-041613	
		Location:	FIELD BLANK		FIELD BLANK	
		Sample Date:	04/11/2013		04/16/2013	
		Sample Type:	FB		FB	
		Lab:	LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer
Triethylene Glycol	8015C	mg/L	10	UJ	10	U
Vanadium	6010C	mg/L	0.01	U	0.01	U
Vinyl Acetate	8260B	µg/L	10	U	10	U
Vinyl Chloride	8260B	µg/L	5	U	5	U
Zinc	6010C	mg/L	0.04	U	0.04	U
Zirconium	6010C	mg/L	0.1	U	0.1	U

Notes:
ug/L - microgram per liter
mg/L - milligram per liter
ng/L - nanogram per liter
pg/L - picogram per liter
U - Compound not detected above the reporting limit

	Sample Name:	TB-052813		TB-052913		TB-053013		TB-060513		TB-060613	
	Location:	5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB	
	Sample Date:	05/28/2013		05/29/2013		05/30/2013		06/05/2013		06/06/2013	
	Sample Type:	TB		TB		TB		TB		TB	
	Lab:	LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L										
1,1,1-Trichloroethane	8260B	µg/L										
1,1,2,2-Tetrachloroethane	8260B	µg/L										
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L										
1,1,2-Trichloroethane	8260B	µg/L										
1,1-Dichloroethane	8260B	µg/L										
1,1-Dichloroethene	8260B	µg/L										
1,1-Dichloropropene	8260B	µg/L										
1,2,3-Trichlorobenzene	8260B	µg/L										
1,2,3-Trichloropropane	8260B	µg/L										
1,2,4-Trichlorobenzene	8260B	µg/L										
1,2,4-Trimethylbenzene	8260B	µg/L										
1,2-Dibromo-3-chloropropane	8260B	µg/L										
1,2-Dibromoethane	8260B	µg/L										
1,2-Dichlorobenzene	8260B	µg/L										
1,2-Dichloroethane	8260B	µg/L										
1,2-Dichloropropane	8260B	µg/L										
1,3,5-Trimethylbenzene	8260B	µg/L										
1,3-Dichlorobenzene	8260B	µg/L										
1,3-Dichloropropane	8260B	µg/L										
1,4-Dichlorobenzene	8260B	µg/L										
1,4-Dioxane	8260B SIM	µg/L										
1-Chlorohexane	8260B	µg/L										
2,2-Dichloropropane	8260B	µg/L										
2-Butanone (MEK)	8260B	µg/L										
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L										
2-Chloroethyl Vinyl Ether	8260B	µg/L										
2-Chlorotoluene	8260B	µg/L										
2-Hexanone	8260B	µg/L										
2-Phenylbutane	8260B	µg/L										
4-Chlorotoluene	8260B	µg/L										
4-Methyl-2-pentanone (MIBK)	8260B	µg/L										
Acetone	8260B	µg/L										
Acrolein	8260B	µg/L										
Acrylonitrile	8260B	µg/L										
Benzene	8260B	µg/L										
Bromobenzene	8260B	µg/L										
Bromochloromethane	8260B	µg/L										
Bromodichloromethane	8260B	µg/L										
Bromoform	8260B	µg/L										
Bromomethane	8260B	µg/L										
Carbon Disulfide	8260B	µg/L										
Carbon Tetrachloride	8260B	µg/L										
Chlorobenzene	8260B	µg/L										
Chloroethane	8260B	µg/L										
Chloroform	8260B	µg/L										
Chloromethane	8260B	µg/L										
Chlorotrifluoroethylene	8260B	µg/L										
cis-1,2-Dichloroethene	8260B	µg/L										
cis-1,3-Dichloropropene	8260B	µg/L										
Cymene	8260B	µg/L										
Di isopropyl Ether	8260B	µg/L										
Dibromochloromethane	8260B	µg/L										
Dibromomethane	8260B	µg/L										
Dichlorodifluoromethane	8260B	µg/L										
Ethylbenzene	8260B	µg/L										
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U
Hexachloro-1,3-butadiene	8260B	µg/L										
Isopropylbenzene	8260B	µg/L										
m,p-Xylene	8260B	µg/L										
Methyl Iodide	8260B	µg/L										
Methyl Tert-Butyl Ether	8260B	µg/L										
Methylene Chloride	8260B	µg/L										
n-Butylbenzene	8260B	µg/L										
n-Propylbenzene	8260B	µg/L										
o-Xylene	8260B	µg/L										
Styrene	8260B	µg/L										
tert-Butyl ethyl ether	8260B	µg/L										
tert-Butylbenzene	8260B	µg/L										
Tertiary amyl methyl ether	8260B	µg/L										
Tertiary butyl alcohol	8260B	µg/L										
Tetrachloroethene	8260B	µg/L										
Toluene	8260B	µg/L										
trans-1,2-Dichloroethene	8260B	µg/L										
trans-1,3-Dichloropropene	8260B	µg/L										
Trichloroethene	8260B	µg/L										
Trichlorofluoromethane	8260B	µg/L										
Vinyl Acetate	8260B	µg/L										
Vinyl Chloride	8260B	µg/L										

Notes:
ug/L - microgram per liter
U - Compound not detected above the reporting limit

	Sample Name:	TB-061013		TB-061113		TB-061213		TB-061413		TB-061713	
	Location:	5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB	
	Sample Date:	06/10/2013		06/11/2013		06/12/2013		06/14/2013		06/17/2013	
	Sample Type:	TB		TB		TB		TB		TB	
	Lab:	LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L										
1,1,1-Trichloroethane	8260B	µg/L										
1,1,2,2-Tetrachloroethane	8260B	µg/L										
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L										
1,1,2-Trichloroethane	8260B	µg/L										
1,1-Dichloroethane	8260B	µg/L										
1,1-Dichloroethene	8260B	µg/L										
1,1-Dichloropropene	8260B	µg/L										
1,2,3-Trichlorobenzene	8260B	µg/L										
1,2,3-Trichloropropane	8260B	µg/L										
1,2,4-Trichlorobenzene	8260B	µg/L										
1,2,4-Trimethylbenzene	8260B	µg/L										
1,2-Dibromo-3-chloropropane	8260B	µg/L										
1,2-Dibromoethane	8260B	µg/L										
1,2-Dichlorobenzene	8260B	µg/L										
1,2-Dichloroethane	8260B	µg/L										
1,2-Dichloropropane	8260B	µg/L										
1,3,5-Trimethylbenzene	8260B	µg/L										
1,3-Dichlorobenzene	8260B	µg/L										
1,3-Dichloropropane	8260B	µg/L										
1,4-Dichlorobenzene	8260B	µg/L										
1,4-Dioxane	8260B SIM	µg/L										
1-Chlorohexane	8260B	µg/L										
2,2-Dichloropropane	8260B	µg/L										
2-Butanone (MEK)	8260B	µg/L										
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L										
2-Chloroethyl Vinyl Ether	8260B	µg/L										
2-Chlorotoluene	8260B	µg/L										
2-Hexanone	8260B	µg/L										
2-Phenylbutane	8260B	µg/L										
4-Chlorotoluene	8260B	µg/L										
4-Methyl-2-pentanone (MIBK)	8260B	µg/L										
Acetone	8260B	µg/L										
Acrolein	8260B	µg/L										
Acrylonitrile	8260B	µg/L										
Benzene	8260B	µg/L										
Bromobenzene	8260B	µg/L										
Bromochloromethane	8260B	µg/L										
Bromodichloromethane	8260B	µg/L										
Bromoform	8260B	µg/L										
Bromomethane	8260B	µg/L										
Carbon Disulfide	8260B	µg/L										
Carbon Tetrachloride	8260B	µg/L										
Chlorobenzene	8260B	µg/L										
Chloroethane	8260B	µg/L										
Chloroform	8260B	µg/L										
Chloromethane	8260B	µg/L										
Chlorotrifluoroethylene	8260B	µg/L										
cis-1,2-Dichloroethene	8260B	µg/L										
cis-1,3-Dichloropropene	8260B	µg/L										
Cymene	8260B	µg/L										
Di isopropyl Ether	8260B	µg/L										
Dibromochloromethane	8260B	µg/L										
Dibromomethane	8260B	µg/L										
Dichlorodifluoromethane	8260B	µg/L										
Ethylbenzene	8260B	µg/L										
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U
Hexachloro-1,3-butadiene	8260B	µg/L										
Isopropylbenzene	8260B	µg/L										
m,p-Xylene	8260B	µg/L										
Methyl Iodide	8260B	µg/L										
Methyl Tert-Butyl Ether	8260B	µg/L										
Methylene Chloride	8260B	µg/L										
n-Butylbenzene	8260B	µg/L										
n-Propylbenzene	8260B	µg/L										
o-Xylene	8260B	µg/L										
Styrene	8260B	µg/L										
tert-Butyl ethyl ether	8260B	µg/L										
tert-Butylbenzene	8260B	µg/L										
Tertiary amyl methyl ether	8260B	µg/L										
Tertiary butyl alcohol	8260B	µg/L										
Tetrachloroethene	8260B	µg/L										
Toluene	8260B	µg/L										
trans-1,2-Dichloroethene	8260B	µg/L										
trans-1,3-Dichloropropene	8260B	µg/L										
Trichloroethene	8260B	µg/L										
Trichlorofluoromethane	8260B	µg/L										
Vinyl Acetate	8260B	µg/L										
Vinyl Chloride	8260B	µg/L										

Notes:
ug/L - microgram per liter
U - Compound not detected above the reporting limit

	Sample Name:	TB-061813		TB-061913		TB-062013		TB2-072913		TB2-111213	
	Location:	5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB	
	Sample Date:	06/18/2013		06/19/2013		06/20/2013		07/29/2013		11/12/2013	
	Sample Type:	TB		TB		TB		TB		TB	
	Lab:	LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L										
1,1,1-Trichloroethane	8260B	µg/L										
1,1,2,2-Tetrachloroethane	8260B	µg/L										
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L										
1,1,2-Trichloroethane	8260B	µg/L										
1,1-Dichloroethane	8260B	µg/L										
1,1-Dichloroethene	8260B	µg/L										
1,1-Dichloropropene	8260B	µg/L										
1,2,3-Trichlorobenzene	8260B	µg/L										
1,2,3-Trichloropropane	8260B	µg/L										
1,2,4-Trichlorobenzene	8260B	µg/L										
1,2,4-Trimethylbenzene	8260B	µg/L										
1,2-Dibromo-3-chloropropane	8260B	µg/L										
1,2-Dibromoethane	8260B	µg/L										
1,2-Dichlorobenzene	8260B	µg/L										
1,2-Dichloroethane	8260B	µg/L										
1,2-Dichloropropane	8260B	µg/L										
1,3,5-Trimethylbenzene	8260B	µg/L										
1,3-Dichlorobenzene	8260B	µg/L										
1,3-Dichloropropane	8260B	µg/L										
1,4-Dichlorobenzene	8260B	µg/L										
1,4-Dioxane	8260B SIM	µg/L										
1-Chlorohexane	8260B	µg/L										
2,2-Dichloropropane	8260B	µg/L										
2-Butanone (MEK)	8260B	µg/L										
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L										
2-Chloroethyl Vinyl Ether	8260B	µg/L										
2-Chlorotoluene	8260B	µg/L										
2-Hexanone	8260B	µg/L										
2-Phenylbutane	8260B	µg/L										
4-Chlorotoluene	8260B	µg/L										
4-Methyl-2-pentanone (MIBK)	8260B	µg/L										
Acetone	8260B	µg/L										
Acrolein	8260B	µg/L										
Acrylonitrile	8260B	µg/L										
Benzene	8260B	µg/L										
Bromobenzene	8260B	µg/L										
Bromochloromethane	8260B	µg/L										
Bromodichloromethane	8260B	µg/L										
Bromoform	8260B	µg/L										
Bromomethane	8260B	µg/L										
Carbon Disulfide	8260B	µg/L										
Carbon Tetrachloride	8260B	µg/L										
Chlorobenzene	8260B	µg/L										
Chloroethane	8260B	µg/L										
Chloroform	8260B	µg/L										
Chloromethane	8260B	µg/L										
Chlorotrifluoroethylene	8260B	µg/L										
cis-1,2-Dichloroethene	8260B	µg/L										
cis-1,3-Dichloropropene	8260B	µg/L										
Cymene	8260B	µg/L										
Di isopropyl Ether	8260B	µg/L										
Dibromochloromethane	8260B	µg/L										
Dibromomethane	8260B	µg/L										
Dichlorodifluoromethane	8260B	µg/L										
Ethylbenzene	8260B	µg/L										
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U
Hexachloro-1,3-butadiene	8260B	µg/L										
Isopropylbenzene	8260B	µg/L										
m,p-Xylene	8260B	µg/L										
Methyl Iodide	8260B	µg/L										
Methyl Tert-Butyl Ether	8260B	µg/L										
Methylene Chloride	8260B	µg/L										
n-Butylbenzene	8260B	µg/L										
n-Propylbenzene	8260B	µg/L										
o-Xylene	8260B	µg/L										
Styrene	8260B	µg/L										
tert-Butyl ethyl ether	8260B	µg/L										
tert-Butylbenzene	8260B	µg/L										
Tertiary amyl methyl ether	8260B	µg/L										
Tertiary butyl alcohol	8260B	µg/L										
Tetrachloroethene	8260B	µg/L										
Toluene	8260B	µg/L										
trans-1,2-Dichloroethene	8260B	µg/L										
trans-1,3-Dichloropropene	8260B	µg/L										
Trichloroethene	8260B	µg/L										
Trichlorofluoromethane	8260B	µg/L										
Vinyl Acetate	8260B	µg/L										
Vinyl Chloride	8260B	µg/L										

Notes:
ug/L - microgram per liter
U - Compound not detected above the reporting limit

	Sample Name:	TB-111313		TB-111413		TB-111813		TB-111913		TB-112213	
	Location:	5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB		5A_DG_TB	
	Sample Date:	11/13/2013		11/14/2013		11/18/2013		11/19/2013		11/22/2013	
	Sample Type:	TB		TB		TB		TB		TB	
	Lab:	LL		LL		LL		LL		LL	
Analyte	Analytic Method	Units	Concentration Final Qualifer		Concentration Final Qualifer		Concentration Final Qualifer		Concentration Final Qualifer		Concentration Final Qualifer	
1,1,1,2-Tetrachloroethane	8260B	µg/L			5	U						
1,1,1-Trichloroethane	8260B	µg/L			5	U						
1,1,2,2-Tetrachloroethane	8260B	µg/L			5	U						
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L			5	U						
1,1,2-Trichloroethane	8260B	µg/L			5	U						
1,1-Dichloroethane	8260B	µg/L			5	U						
1,1-Dichloroethene	8260B	µg/L			5	U						
1,1-Dichloropropene	8260B	µg/L			5	U						
1,2,3-Trichlorobenzene	8260B	µg/L			5	U						
1,2,3-Trichloropropane	8260B	µg/L			5	U						
1,2,4-Trichlorobenzene	8260B	µg/L			5	U						
1,2,4-Trimethylbenzene	8260B	µg/L			5	U						
1,2-Dibromo-3-chloropropane	8260B	µg/L			5	U						
1,2-Dibromoethane	8260B	µg/L			5	U						
1,2-Dichlorobenzene	8260B	µg/L			5	U						
1,2-Dichloroethane	8260B	µg/L			5	U						
1,2-Dichloropropane	8260B	µg/L			5	U						
1,3,5-Trimethylbenzene	8260B	µg/L			5	U						
1,3-Dichlorobenzene	8260B	µg/L			5	U						
1,3-Dichloropropane	8260B	µg/L			5	U						
1,4-Dichlorobenzene	8260B	µg/L			5	U						
1,4-Dioxane	8260B SIM	µg/L			2	U						
1-Chlorohexane	8260B	µg/L			5	U						
2,2-Dichloropropane	8260B	µg/L			5	U						
2-Butanone (MEK)	8260B	µg/L			10	U						
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L			5	U						
2-Chloroethyl Vinyl Ether	8260B	µg/L			10	U						
2-Chlorotoluene	8260B	µg/L			5	U						
2-Hexanone	8260B	µg/L			10	U						
2-Phenylbutane	8260B	µg/L			5	U						
4-Chlorotoluene	8260B	µg/L			5	U						
4-Methyl-2-pentanone (MIBK)	8260B	µg/L			10	U						
Acetone	8260B	µg/L			20	U						
Acrolein	8260B	µg/L			100	U						
Acrylonitrile	8260B	µg/L			20	U						
Benzene	8260B	µg/L			5	U						
Bromobenzene	8260B	µg/L			5	U						
Bromochloromethane	8260B	µg/L			5	U						
Bromodichloromethane	8260B	µg/L			5	U						
Bromoform	8260B	µg/L			5	U						
Bromomethane	8260B	µg/L			5	U						
Carbon Disulfide	8260B	µg/L			5	U						
Carbon Tetrachloride	8260B	µg/L			5	U						
Chlorobenzene	8260B	µg/L			5	U						
Chloroethane	8260B	µg/L			5	U						
Chloroform	8260B	µg/L			5	U						
Chloromethane	8260B	µg/L			5	U						
Chlorotrifluoroethylene	8260B	µg/L			5	U						
cis-1,2-Dichloroethene	8260B	µg/L			5	U						
cis-1,3-Dichloropropene	8260B	µg/L			5	U						
Cymene	8260B	µg/L			5	U						
Di isopropyl Ether	8260B	µg/L			5	U						
Dibromochloromethane	8260B	µg/L			5	U						
Dibromomethane	8260B	µg/L			5	U						
Dichlorodifluoromethane	8260B	µg/L			5	U						
Ethylbenzene	8260B	µg/L			5	U						
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U	50	U	50	U	50	U	50	U
Hexachloro-1,3-butadiene	8260B	µg/L			5	U						
Isopropylbenzene	8260B	µg/L			5	U						
m,p-Xylene	8260B	µg/L			5	U						
Methyl Iodide	8260B	µg/L			5	U						
Methyl Tert-Butyl Ether	8260B	µg/L			5	U						
Methylene Chloride	8260B	µg/L			5	U						
n-Butylbenzene	8260B	µg/L			5	U						
n-Propylbenzene	8260B	µg/L			5	U						
o-Xylene	8260B	µg/L			5	U						
Styrene	8260B	µg/L			5	U						
tert-Butyl ethyl ether	8260B	µg/L			5	U						
tert-Butylbenzene	8260B	µg/L			5	U						
Tertiary amyl methyl ether	8260B	µg/L			5	U						
Tertiary butyl alcohol	8260B	µg/L			50	U						
Tetrachloroethene	8260B	µg/L			5	U						
Toluene	8260B	µg/L			5	U						
trans-1,2-Dichloroethene	8260B	µg/L			5	U						
trans-1,3-Dichloropropene	8260B	µg/L			5	U						
Trichloroethene	8260B	µg/L			5	U						
Trichlorofluoromethane	8260B	µg/L			5	U						
Vinyl Acetate	8260B	µg/L			10	U						
Vinyl Chloride	8260B	µg/L			5	U						

Notes:
ug/L - microgram per liter
U - Compound not detected above the reporting limit

		Sample Name:	TB-112613	
		Location:	5A_DG_TB	
		Sample Date:	11/26/2013	
		Sample Type:	TB	
		Lab:	LL	
Analyte	Analytic Method	Units	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	8260B	µg/L		
1,1,1-Trichloroethane	8260B	µg/L		
1,1,2,2-Tetrachloroethane	8260B	µg/L		
1,1,2-Trichloro-1,2,2-trifluoroethane	8260B	µg/L		
1,1,2-Trichloroethane	8260B	µg/L		
1,1-Dichloroethane	8260B	µg/L		
1,1-Dichloroethene	8260B	µg/L		
1,1-Dichloropropene	8260B	µg/L		
1,2,3-Trichlorobenzene	8260B	µg/L		
1,2,3-Trichloropropane	8260B	µg/L		
1,2,4-Trichlorobenzene	8260B	µg/L		
1,2,4-Trimethylbenzene	8260B	µg/L		
1,2-Dibromo-3-chloropropane	8260B	µg/L		
1,2-Dibromoethane	8260B	µg/L		
1,2-Dichlorobenzene	8260B	µg/L		
1,2-Dichloroethane	8260B	µg/L		
1,2-Dichloropropane	8260B	µg/L		
1,3,5-Trimethylbenzene	8260B	µg/L		
1,3-Dichlorobenzene	8260B	µg/L		
1,3-Dichloropropane	8260B	µg/L		
1,4-Dichlorobenzene	8260B	µg/L		
1,4-Dioxane	8260B SIM	µg/L		
1-Chlorohexane	8260B	µg/L		
2,2-Dichloropropane	8260B	µg/L		
2-Butanone (MEK)	8260B	µg/L		
2-Chloro-1,1,1-trifluoroethane	8260B	µg/L		
2-Chloroethyl Vinyl Ether	8260B	µg/L		
2-Chlorotoluene	8260B	µg/L		
2-Hexanone	8260B	µg/L		
2-Phenylbutane	8260B	µg/L		
4-Chlorotoluene	8260B	µg/L		
4-Methyl-2-pentanone (MIBK)	8260B	µg/L		
Acetone	8260B	µg/L		
Acrolein	8260B	µg/L		
Acrylonitrile	8260B	µg/L		
Benzene	8260B	µg/L		
Bromobenzene	8260B	µg/L		
Bromochloromethane	8260B	µg/L		
Bromodichloromethane	8260B	µg/L		
Bromoform	8260B	µg/L		
Bromomethane	8260B	µg/L		
Carbon Disulfide	8260B	µg/L		
Carbon Tetrachloride	8260B	µg/L		
Chlorobenzene	8260B	µg/L		
Chloroethane	8260B	µg/L		
Chloroform	8260B	µg/L		
Chloromethane	8260B	µg/L		
Chlorotrifluoroethylene	8260B	µg/L		
cis-1,2-Dichloroethene	8260B	µg/L		
cis-1,3-Dichloropropene	8260B	µg/L		
Cymene	8260B	µg/L		
Di isopropyl Ether	8260B	µg/L		
Dibromochloromethane	8260B	µg/L		
Dibromomethane	8260B	µg/L		
Dichlorodifluoromethane	8260B	µg/L		
Ethylbenzene	8260B	µg/L		
Gasoline Range Organics (C5-C12)	8015M	µg/L	50	U
Hexachloro-1,3-butadiene	8260B	µg/L		
Isopropylbenzene	8260B	µg/L		
m,p-Xylene	8260B	µg/L		
Methyl Iodide	8260B	µg/L		
Methyl Tert-Butyl Ether	8260B	µg/L		
Methylene Chloride	8260B	µg/L		
n-Butylbenzene	8260B	µg/L		
n-Propylbenzene	8260B	µg/L		
o-Xylene	8260B	µg/L		
Styrene	8260B	µg/L		
tert-Butyl ethyl ether	8260B	µg/L		
tert-Butylbenzene	8260B	µg/L		
Tertiary amyl methyl ether	8260B	µg/L		
Tertiary butyl alcohol	8260B	µg/L		
Tetrachloroethene	8260B	µg/L		
Toluene	8260B	µg/L		
trans-1,2-Dichloroethene	8260B	µg/L		
trans-1,3-Dichloropropene	8260B	µg/L		
Trichloroethene	8260B	µg/L		
Trichlorofluoromethane	8260B	µg/L		
Vinyl Acetate	8260B	µg/L		
Vinyl Chloride	8260B	µg/L		

Notes:
ug/L - microgram per liter
U - Compound not detected above the reporting limit

				Location	5A_DG-780		5A_DG-780		RPD
				Sample Name:	SL-1180-SA5A-SB-3.0-4.0		SL-780-SA5A-SB-3.0-4.0		
				Sample Date	06/17/2013		06/17/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.0407	J	0.0482	J	16.87
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	5.19	UJ	5.19	UJ	--
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.19	UJ	5.19	UJ	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.19	UJ	5.19	UJ	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	5.19	U	5.19	U	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.19	UJ	5.19	UJ	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.04	U	1.04	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.0192	J	1.04	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	10.4	UJ	10.4	UJ	--
Dioxins	OCDF	39001-02-0	1613B	ng/kg	10.4	UJ	10.4	UJ	--
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.137		0.0568		82.77
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0172	U	0.0165	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	27900		22700		20.55
Metals	Antimony	7440-36-0	6010C	mg/kg	4.24	UJ	4.15	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	12.8		10.8		16.95
Metals	Barium	7440-39-3	6010C	mg/kg	171		126		30.30
Metals	Beryllium	7440-41-7	6010C	mg/kg	1.47		1.08		30.59
Metals	Boron	7440-42-8	6010C	mg/kg	10.6	U	10.4	U	--
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.103	J	1.04	UJ	200.00
Metals	Calcium	7440-70-2	6010C	mg/kg	6080		4440		31.18
Metals	Chromium	7440-47-3	6010C	mg/kg	49.7		36.2		31.43
Metals	Cobalt	7440-48-4	6010C	mg/kg	12.8	J	8.66	J	38.58
Metals	Copper	7440-50-8	6010C	mg/kg	27.4	J	17.9	J	41.94
Metals	Iron	7439-89-6	6010C	mg/kg	44500		35600		22.22
Metals	Lead	7439-92-1	6010C	mg/kg	16.6		11.8		33.80
Metals	Lithium	7439-93-2	6010C	mg/kg	52.7		45.9		13.79
Metals	Magnesium	7439-95-4	6010C	mg/kg	10500		8040		26.54
Metals	Manganese	7439-96-5	6010C	mg/kg	618	J	372	J	49.70
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.12	UJ	2.08	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	32.2		23.3		32.07
Metals	Phosphorus	7723-14-0	6010C	mg/kg	611		581		5.03
Metals	Potassium	7440-09-7	6010C	mg/kg	3110	J	2950	J	5.28
Metals	Selenium	7782-49-2	6020A	mg/kg	0.265	J	0.338	J	24.21
Metals	Silver	7440-22-4	6020A	mg/kg	0.212	U	0.208	U	--
Metals	Sodium	7440-23-5	6010C	mg/kg	270		181		39.47
Metals	Strontium	7440-24-6	6020A	mg/kg	47.4	J	32.8	J	36.41
Metals	Thallium	7440-28-0	6020A	mg/kg	0.393		0.36		8.76
Metals	Tin	7440-31-5	6010C	mg/kg	10.6	U	10.4	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1730		1530		12.27
Metals	Vanadium	7440-62-2	6010C	mg/kg	78.1		59.6		26.87
Metals	Zinc	7440-66-6	6010C	mg/kg	102		86.7		16.22
Metals	Zirconium	7440-67-7	6010C	mg/kg	5.38		5.06	J	6.13
Moisture Content	Moisture	MOIST	160.3M	%	6.6		4.6		35.71
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	0.79	J	0.92	J	15.20
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.8	U	1.7	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.8	U	1.7	U	--

				Location	5A_DG-780		5A_DG-780		RPD
				Sample Name:	SL-1180-SA5A-SB-3.0-4.0		SL-780-SA5A-SB-3.0-4.0		
				Sample Date	06/17/2013		06/17/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.78		6.93		2.19
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.4	U	5.2	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.4	U	5.2	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	5.4	U	5.2	U	--
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	11	U	10	U	--
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.4	U	5.2	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	1.2	U	1	U	--

				Location	5A_DG-780		5A_DG-780		RPD
				Sample Name:	SL-1180-SA5A-SB-3.0-4.0		SL-780-SA5A-SB-3.0-4.0		
				Sample Date	06/17/2013		06/17/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-852		5A_DG-852		RPD
				Sample Name:	SL-1252-SA5A-SB-0.0-0.5		SL-852-SA5A-SB-0.0-0.5		
				Sample Date	06/14/2013		06/14/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	5.88		8.64	J	38.02
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	0.891	J	1.25	J	33.54
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	4.97	U	4.99	U	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	4.97	U	4.99	U	--
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	4.97	U	4.99	U	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.447	J	0.539	J	18.66
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.196	J	4.99	U	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.514	J	0.581	J	12.24
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.279	J	0.26	J	7.05
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	4.97	U	0.355	J	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	4.97	U	4.99	U	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.182	J	0.144	J	23.31
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	4.97	U	4.99	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.995	U	0.998	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.995	UJ	0.998	UJ	--
Dioxins	OCDD	3268-87-9	1613B	ng/kg	88.1		131	J	39.16
Dioxins	OCDF	39001-02-0	1613B	ng/kg	2.05	J	3.64	J	55.89
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.186		0.266		35.40
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0163	U	0.0161	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	16000	J	14200	J	11.92
Metals	Antimony	7440-36-0	6010C	mg/kg	3.87	UJ	3.99	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	2.86	J	1.99	J	35.88
Metals	Barium	7440-39-3	6010C	mg/kg	107	J	89.2	J	18.14
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.591	J	0.487	J	19.29
Metals	Boron	7440-42-8	6010C	mg/kg	4.03	J	4.14	J	2.69
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.969	UJ	0.997	UJ	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2560	J	2240	J	13.33
Metals	Chromium	7440-47-3	6010C	mg/kg	22.4	J	19	J	16.43
Metals	Cobalt	7440-48-4	6010C	mg/kg	5.64	J	4.41	J	24.48
Metals	Copper	7440-50-8	6010C	mg/kg	11	J	9.27	J	17.07
Metals	Iron	7439-89-6	6010C	mg/kg	21800	J	18000	J	19.10
Metals	Lead	7439-92-1	6010C	mg/kg	8.94	J	7.29	J	20.33
Metals	Lithium	7439-93-2	6010C	mg/kg	21.8	J	19.6	J	10.63
Metals	Magnesium	7439-95-4	6010C	mg/kg	4390	J	3800	J	14.41
Metals	Manganese	7439-96-5	6010C	mg/kg	337	J	275	J	20.26
Metals	Molybdenum	7439-98-7	6010C	mg/kg	1.94	UJ	1.99	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13.4	J	11.1	J	18.78
Metals	Phosphorus	7723-14-0	6010C	mg/kg	423	J	337	J	22.63
Metals	Potassium	7440-09-7	6010C	mg/kg	3890	J	3510	J	10.27
Metals	Selenium	7782-49-2	6020A	mg/kg	0.17	J	0.164	J	3.59
Metals	Silver	7440-22-4	6020A	mg/kg	0.194	UJ	0.199	UJ	--
Metals	Sodium	7440-23-5	6010C	mg/kg	82.5	J	75.7	J	8.60
Metals	Strontium	7440-24-6	6020A	mg/kg	29.9	J	25.3	J	16.67
Metals	Thallium	7440-28-0	6020A	mg/kg	0.319		0.337		5.49
Metals	Tin	7440-31-5	6010C	mg/kg	9.69	UJ	9.97	UJ	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1160	J	1100	J	5.31
Metals	Vanadium	7440-62-2	6010C	mg/kg	38.5	J	31.2	J	20.95
Metals	Zinc	7440-66-6	6010C	mg/kg	60.4	J	49.7	J	19.44
Metals	Zirconium	7440-67-7	6010C	mg/kg	0.997	J	1.42	J	35.00
Moisture Content	Moisture	MOIST	160.3M	%	0.74		0.67		9.93
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	UJ	1.2	J	200.00
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	0.78	J	1.4	J	56.88
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	2.4		3.4		34.48
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	17	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	UJ	0.72	J	200.00
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	0.74	J	1	J	29.89
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	11	J	18	U	200.00
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	6.2	J	18	UJ	200.00
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1	J	2.4	J	82.35
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.2	J	3.1	J	88.37
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	UJ	0.8	J	200.00
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	0.67	J	1.8	J	91.50
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.1	J	2.6	J	81.08

				Location	5A_DG-852		5A_DG-852		RPD
				Sample Name:	SL-1252-SA5A-SB-0.0-0.5		SL-852-SA5A-SB-0.0-0.5		
				Sample Date	06/14/2013		06/14/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	33	U	33	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	33	UJ	33	UJ	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	33	U	33	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.03		6.2		2.78
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5	U	5	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5	U	5	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	7.6		8.1	J	6.37
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	21		22		4.65
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5	U	5	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-852		5A_DG-852		RPD
				Sample Name:	SL-1252-SA5A-SB-0.0-0.5		SL-852-SA5A-SB-0.0-0.5		
				Sample Date	06/14/2013		06/14/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-778		5A_DG-778		RPD
				Sample Name:	SL-1178-SA5A-SB-0.0-0.5		SL-778-SA5A-SB-0.0-0.5		
				Sample Date	06/12/2013		06/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg					--
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg					--
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg					--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg					--
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg					--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg					--
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg					--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg					--
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg					--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg					--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg					--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg					--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg					--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg					--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg					--
Dioxins	OCDD	3268-87-9	1613B	ng/kg					--
Dioxins	OCDF	39001-02-0	1613B	ng/kg					--
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg					--
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg					--
Metals	Aluminum	7429-90-5	6010C	mg/kg					--
Metals	Antimony	7440-36-0	6010C	mg/kg					--
Metals	Arsenic	7440-38-2	6010C	mg/kg					--
Metals	Barium	7440-39-3	6010C	mg/kg					--
Metals	Beryllium	7440-41-7	6010C	mg/kg					--
Metals	Boron	7440-42-8	6010C	mg/kg					--
Metals	Cadmium	7440-43-9	6010C	mg/kg					--
Metals	Calcium	7440-70-2	6010C	mg/kg					--
Metals	Chromium	7440-47-3	6010C	mg/kg					--
Metals	Cobalt	7440-48-4	6010C	mg/kg					--
Metals	Copper	7440-50-8	6010C	mg/kg					--
Metals	Iron	7439-89-6	6010C	mg/kg					--
Metals	Lead	7439-92-1	6010C	mg/kg					--
Metals	Lithium	7439-93-2	6010C	mg/kg					--
Metals	Magnesium	7439-95-4	6010C	mg/kg					--
Metals	Manganese	7439-96-5	6010C	mg/kg					--
Metals	Molybdenum	7439-98-7	6010C	mg/kg					--
Metals	Nickel	7440-02-0	6010C	mg/kg					--
Metals	Phosphorus	7723-14-0	6010C	mg/kg					--
Metals	Potassium	7440-09-7	6010C	mg/kg					--
Metals	Selenium	7782-49-2	6020A	mg/kg					--
Metals	Silver	7440-22-4	6020A	mg/kg					--
Metals	Sodium	7440-23-5	6010C	mg/kg					--
Metals	Strontium	7440-24-6	6020A	mg/kg					--
Metals	Thallium	7440-28-0	6020A	mg/kg					--
Metals	Tin	7440-31-5	6010C	mg/kg					--
Metals	Titanium	7440-32-6	6010C	mg/kg					--
Metals	Vanadium	7440-62-2	6010C	mg/kg					--
Metals	Zinc	7440-66-6	6010C	mg/kg					--
Metals	Zirconium	7440-67-7	6010C	mg/kg					--
Moisture Content	Moisture	MOIST	160.3M	%	3.1		2.6		17.54
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg					--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg					--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg					--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg					--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg					--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg					--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg					--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg					--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg					--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg					--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg					--
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg					--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg					--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg					--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg					--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg					--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg					--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg					--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg					--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg					--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg					--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg					--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg					--

				Location	5A_DG-778		5A_DG-778		RPD
				Sample Name:	SL-1178-SA5A-SB-0.0-0.5		SL-778-SA5A-SB-0.0-0.5		
				Sample Date	06/12/2013		06/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg	5.2	U	5.1	U	--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH					--
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg					--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg					--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg					--
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg					--
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg					--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-778		5A_DG-778		RPD
				Sample Name:	SL-1178-SA5A-SB-0.0-0.5		SL-778-SA5A-SB-0.0-0.5		
				Sample Date	06/12/2013		06/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-783		5A_DG-783		RPD
				Sample Name:	SL-1183-SA5A-SB-0.0-0.5		SL-783-SA5A-SB-0.0-0.5		
				Sample Date	06/11/2013		06/11/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	5.97	J	50.4	J	157.64
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	0.578	J	3.98	J	149.28
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	5.17	UJ	0.711	J	200.00
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.373	J	1.8	J	131.34
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	5.17	UJ	1.74	J	200.00
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.17	U	5.08	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	5.17	UJ	5.08	UJ	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.17	U	5.08	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.03	UJ	1.02	UJ	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	1.03	UJ	1.02	UJ	--
Dioxins	OCDD	3268-87-9	1613B	ng/kg	58.8	J	1170	J	180.86
Dioxins	OCDF	39001-02-0	1613B	ng/kg	1.14	J	12.4	J	166.32
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.142		1.93		172.59
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg	2100	U	2000	U	--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg	0.27	J	0.49	J	57.89
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0171	UJ	0.0214	J	200.00
Metals	Aluminum	7429-90-5	6010C	mg/kg	16300		15400		5.68
Metals	Antimony	7440-36-0	6010C	mg/kg	4.13	UJ	4.05	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	5.67		3.75	J	40.76
Metals	Barium	7440-39-3	6010C	mg/kg	94.4		97.7		3.44
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.792	J	0.581	J	30.74
Metals	Boron	7440-42-8	6010C	mg/kg	4.22	J	4.93	J	15.52
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.639	J	0.712	J	10.81
Metals	Calcium	7440-70-2	6010C	mg/kg	2480		2740		9.96
Metals	Chromium	7440-47-3	6010C	mg/kg	19.3	J	22.9	J	17.06
Metals	Cobalt	7440-48-4	6010C	mg/kg	10.6	J	5.77	J	59.01
Metals	Copper	7440-50-8	6010C	mg/kg	12.4	J	0.571	J	182.39
Metals	Iron	7439-89-6	6010C	mg/kg	27800		21200		26.94
Metals	Lead	7439-92-1	6010C	mg/kg	8.3		11		27.98
Metals	Lithium	7439-93-2	6010C	mg/kg	26.9		22.5		17.81
Metals	Magnesium	7439-95-4	6010C	mg/kg	5120		4000		24.56
Metals	Manganese	7439-96-5	6010C	mg/kg	357		312		13.45
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.07	UJ	2.02	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	12.2		13.9		13.03
Metals	Phosphorus	7723-14-0	6010C	mg/kg	429	J	394	J	8.51
Metals	Potassium	7440-09-7	6010C	mg/kg	3470		3360		3.22
Metals	Selenium	7782-49-2	6020A	mg/kg	0.177	J	0.405	UJ	200.00
Metals	Silver	7440-22-4	6020A	mg/kg	0.207	UJ	0.0599	J	200.00
Metals	Sodium	7440-23-5	6010C	mg/kg	112		109		2.71
Metals	Strontium	7440-24-6	6020A	mg/kg	22.4	J	19	J	16.43
Metals	Thallium	7440-28-0	6020A	mg/kg	0.283	J	0.252	J	11.59
Metals	Tin	7440-31-5	6010C	mg/kg	10.3	U	10.1	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1150		1070		7.21
Metals	Vanadium	7440-62-2	6010C	mg/kg	38		34.5		9.66
Metals	Zinc	7440-66-6	6010C	mg/kg	66.9		64.4		3.81
Metals	Zirconium	7440-67-7	6010C	mg/kg	1.41	J	2.13	J	40.68
Moisture Content	Moisture	MOIST	160.3M	%	3.2		2.2		37.04
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.8	J	1.7	UJ	200.00
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	17	UJ	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	9.6	J	14	J	37.29
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.1	J	1.7	UJ	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	18	UJ	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	7	J	94	J	172.28
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.2	J	1.7	UJ	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	0.79	J	1.7	UJ	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.1	J	1.7	UJ	200.00

				Location	5A_DG-783		5A_DG-783		RPD
				Sample Name:	SL-1183-SA5A-SB-0.0-0.5		SL-783-SA5A-SB-0.0-0.5		
				Sample Date	06/11/2013		06/11/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	18	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	34	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	7.68		6.88		10.99
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	5.2	UJ	11	J	200.00
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	10	UJ	25	J	200.00
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.2	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-783		5A_DG-783		RPD
				Sample Name:	SL-1183-SA5A-SB-0.0-0.5		SL-783-SA5A-SB-0.0-0.5		
				Sample Date	06/11/2013		06/11/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-774		5A_DG-774		RPD
				Sample Name:	SL-1174-SA5A-SB-0.0-0.5		SL-774-SA5A-SB-0.0-0.5		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	0.69	J	5.55	J	155.77
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	5.15	UJ	0.762	J	200.00
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.15	UJ	5.09	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	5.15	UJ	5.09	UJ	--
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	5.15	UJ	0.453	J	200.00
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	5.15	UJ	0.548	J	200.00
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.15	U	5.09	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.03	UJ	1.02	UJ	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	1.03	U	1.02	U	--
Dioxins	OCDD	3268-87-9	1613B	ng/kg	7.33	J	64.9	J	159.41
Dioxins	OCDF	39001-02-0	1613B	ng/kg	10.3	UJ	2.08	J	200.00
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.0467		0.217		129.16
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0114	J	0.0125	J	9.21
Metals	Aluminum	7429-90-5	6010C	mg/kg	17600		23300		27.87
Metals	Antimony	7440-36-0	6010C	mg/kg	4.11	UJ	4	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	3.81	J	4.42		14.82
Metals	Barium	7440-39-3	6010C	mg/kg	105		108		2.82
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.641	J	0.812	J	23.54
Metals	Boron	7440-42-8	6010C	mg/kg	4.55	J	4.91	J	7.61
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.561	J	0.511	J	9.33
Metals	Calcium	7440-70-2	6010C	mg/kg	1710		1800		5.13
Metals	Chromium	7440-47-3	6010C	mg/kg	19.6		22.1		11.99
Metals	Cobalt	7440-48-4	6010C	mg/kg	6.18		6.52		5.35
Metals	Copper	7440-50-8	6010C	mg/kg	10.3	UJ	20	UJ	--
Metals	Iron	7439-89-6	6010C	mg/kg	20200		22100		8.98
Metals	Lead	7439-92-1	6010C	mg/kg	6.83		6.5		4.95
Metals	Lithium	7439-93-2	6010C	mg/kg	19.2		22.6		16.27
Metals	Magnesium	7439-95-4	6010C	mg/kg	3640		3820		4.83
Metals	Manganese	7439-96-5	6010C	mg/kg	346		275		22.87
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.05	UJ	2	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13		14.2		8.82
Metals	Phosphorus	7723-14-0	6010C	mg/kg	259		217		17.65
Metals	Potassium	7440-09-7	6010C	mg/kg	3340	J	2170	J	42.47
Metals	Selenium	7782-49-2	6020A	mg/kg	0.197	J	0.156	J	23.23
Metals	Silver	7440-22-4	6020A	mg/kg	0.0459	J	0.0444	J	3.32
Metals	Sodium	7440-23-5	6010C	mg/kg	85	J	99.1	J	15.32
Metals	Strontium	7440-24-6	6020A	mg/kg	24.3	J	22.6	J	7.25
Metals	Thallium	7440-28-0	6020A	mg/kg	0.277	J	0.261	J	5.95
Metals	Tin	7440-31-5	6010C	mg/kg	10.3	U	10	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1310		1310		0.00
Metals	Vanadium	7440-62-2	6010C	mg/kg	36.4		41.3		12.61
Metals	Zinc	7440-66-6	6010C	mg/kg	45.4		42.4		6.83
Metals	Zirconium	7440-67-7	6010C	mg/kg	1.28	J	2.25	J	54.96
Moisture Content	Moisture	MOIST	160.3M	%	4.5		2		76.92
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	U	1.7	UJ	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.61	J	1.7	UJ	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	54	J	190	J	111.48
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.7	U	1.7	U	--

				Location	5A_DG-774		5A_DG-774		RPD
				Sample Name:	SL-1174-SA5A-SB-0.0-0.5		SL-774-SA5A-SB-0.0-0.5		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Aldrin	309-00-2	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg	2	U	1.9	U	--
Pesticides	Chlordane	57-74-9	8081B	µg/kg	18	U	17	U	--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin	72-20-8	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg	1.9	U	1.8	U	--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg	0.87	U	0.85	U	--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg	7	U	6.8	U	--
Pesticides	Mirex	2385-85-5	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg	34	U	34	U	--
pH	pH	pH	9045M	pH	6.62		6.33		4.48
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	4.4	J	3	J	37.84
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	12	J	6.8	J	55.32
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.2	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-774		5A_DG-774		RPD
				Sample Name:	SL-1174-SA5A-SB-0.0-0.5		SL-774-SA5A-SB-0.0-0.5		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-776		5A_DG-776		RPD
				Sample Name:	SL-1176-SA5A-SB-6.0-7.0		SL-776-SA5A-SB-6.0-7.0		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	6		6		
				End Depth:	7		7		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.35	UJ	5.34	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.0598	J	5.34	UJ	200.00
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.35	UJ	5.34	UJ	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	5.35	U	5.34	U	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.35	UJ	5.34	UJ	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.07	U	1.07	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.0313	J	1.07	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	10.7	U	10.7	U	--
Dioxins	OCDF	39001-02-0	1613B	ng/kg	10.7	U	10.7	U	--
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.0346		0.00172		181.06
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0179	U	0.0177	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	18600		18400		1.08
Metals	Antimony	7440-36-0	6010C	mg/kg	0.846	J	0.735	J	14.04
Metals	Arsenic	7440-38-2	6010C	mg/kg	6.23		6.93		10.64
Metals	Barium	7440-39-3	6010C	mg/kg	53.1		58.2		9.16
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.671	J	0.716	J	6.49
Metals	Boron	7440-42-8	6010C	mg/kg	2.23	J	2.53	J	12.61
Metals	Cadmium	7440-43-9	6010C	mg/kg	1.05	U	1.04	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	1630	J	1620	J	0.62
Metals	Chromium	7440-47-3	6010C	mg/kg	21.2		21.1		0.47
Metals	Cobalt	7440-48-4	6010C	mg/kg	5.01		3.3		41.16
Metals	Copper	7440-50-8	6010C	mg/kg	9.37		8.65		7.99
Metals	Iron	7439-89-6	6010C	mg/kg	24000		23400		2.53
Metals	Lead	7439-92-1	6010C	mg/kg	7.02		6.39		9.40
Metals	Lithium	7439-93-2	6010C	mg/kg	23.5		22.9		2.59
Metals	Magnesium	7439-95-4	6010C	mg/kg	4690		4560		2.81
Metals	Manganese	7439-96-5	6010C	mg/kg	171		130		27.24
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.1	U	2.08	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	9.26		8.79		5.21
Metals	Phosphorus	7723-14-0	6010C	mg/kg	94.3		115		19.78
Metals	Potassium	7440-09-7	6010C	mg/kg	1830	J	1520	J	18.51
Metals	Selenium	7782-49-2	6020A	mg/kg	0.42	U	0.417	U	--
Metals	Silver	7440-22-4	6020A	mg/kg	0.21	UJ	0.0319	J	200.00
Metals	Sodium	7440-23-5	6010C	mg/kg	854		895		4.69
Metals	Strontium	7440-24-6	6020A	mg/kg	17		18.8		10.06
Metals	Thallium	7440-28-0	6020A	mg/kg	0.288		0.263		9.07
Metals	Tin	7440-31-5	6010C	mg/kg	10.5	U	10.4	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1150		1090		5.36
Metals	Vanadium	7440-62-2	6010C	mg/kg	37.4		37.8		1.06
Metals	Zinc	7440-66-6	6010C	mg/kg	44.8		41.8		6.93
Metals	Zirconium	7440-67-7	6010C	mg/kg	3.14	J	3.14	J	0.00
Moisture Content	Moisture	MOIST	160.3M	%	5.5		6.8		#VALUE!
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.8	UJ	0.79	J	200.00
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	19	UJ	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.5	J	0.66	J	27.59
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	19	UJ	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.8	U	1.8	U	--

				Location	5A_DG-776		5A_DG-776		RPD
				Sample Name:	SL-1176-SA5A-SB-6.0-7.0		SL-776-SA5A-SB-6.0-7.0		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	6		6		
				End Depth:	7		7		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Aldrin	309-00-2	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg	2	U	2	U	--
Pesticides	Chlordane	57-74-9	8081B	µg/kg	18	U	18	U	--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Endrin	72-20-8	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg	1.9	U	1.9	U	--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg	0.89	U	0.89	U	--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg	7.2	U	7.2	U	--
Pesticides	Mirex	2385-85-5	8081B	µg/kg	1.8	U	1.8	U	--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg	35	U	35	U	--
pH	pH	pH	9045M	pH	8.42		7.86		6.88
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.4	U	5.3	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.4	U	5.3	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	5.4	U	5.3	U	--
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	11	U	11	U	--
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.4	U	5.3	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	0.4	J	1	UJ	200.00

				Location	5A_DG-776		5A_DG-776		RPD
				Sample Name:	SL-1176-SA5A-SB-6.0-7.0		SL-776-SA5A-SB-6.0-7.0		
				Sample Date	06/10/2013		06/10/2013		
				Start Depth:	6		6		
				End Depth:	7		7		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-871		5A_DG-871		RPD
				Sample Name:	SL-1271-SA5A-SB-0.0-0.5		SL-871-SA5A-SB-0.0-0.5		
				Sample Date	06/06/2013		06/06/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	7.78	J	1.67	J	129.31
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	2.22	J	0.466	J	130.60
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5	UJ	5.09	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.15	J	0.0394	J	116.79
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5	UJ	5.09	UJ	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.42	J	0.259	J	47.42
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.241	J	5.09	UJ	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.523	J	0.31	J	51.14
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5	U	5.09	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5	U	5.09	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5	U	5.09	U	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.15	J	5.09	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5	UJ	5.09	UJ	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1	U	1.02	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.0807	J	1.02	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	109	J	19.8	J	138.51
Dioxins	OCDF	39001-02-0	1613B	ng/kg	7.71	J	1.54	J	133.41
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.353		0.194		58.14
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.016	U	0.0169	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	14700		15000		2.02
Metals	Antimony	7440-36-0	6010C	mg/kg	4.01	UJ	4	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	5.15		5.07		1.57
Metals	Barium	7440-39-3	6010C	mg/kg	104		108		3.77
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.647	J	0.644	J	0.46
Metals	Boron	7440-42-8	6010C	mg/kg	3.27	J	4.78	J	37.52
Metals	Cadmium	7440-43-9	6010C	mg/kg	1	U	0.999	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2080		2490		17.94
Metals	Chromium	7440-47-3	6010C	mg/kg	21.9		22.7		3.59
Metals	Cobalt	7440-48-4	6010C	mg/kg	5.56		5.64		1.43
Metals	Copper	7440-50-8	6010C	mg/kg	11.8	J	11.9	J	0.84
Metals	Iron	7439-89-6	6010C	mg/kg	19300		19500		1.03
Metals	Lead	7439-92-1	6010C	mg/kg	5.19		8.56		49.02
Metals	Lithium	7439-93-2	6010C	mg/kg	23.9		23.8		0.42
Metals	Magnesium	7439-95-4	6010C	mg/kg	4410		4520		2.46
Metals	Manganese	7439-96-5	6010C	mg/kg	315		330		4.65
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.01	U	2	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	14.6		15.2		4.03
Metals	Phosphorus	7723-14-0	6010C	mg/kg	366		441		18.59
Metals	Potassium	7440-09-7	6010C	mg/kg	3590		4040		11.80
Metals	Selenium	7782-49-2	6020A	mg/kg	0.14	J	0.152	J	8.22
Metals	Silver	7440-22-4	6020A	mg/kg	0.047	J	0.0441	J	6.37
Metals	Sodium	7440-23-5	6010C	mg/kg	71.2	J	71.7	J	0.70
Metals	Strontium	7440-24-6	6020A	mg/kg	19.7	J	23.5	J	17.59
Metals	Thallium	7440-28-0	6020A	mg/kg	0.29	J	0.308	J	6.02
Metals	Tin	7440-31-5	6010C	mg/kg	10	U	9.99	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1140		1210		5.96
Metals	Vanadium	7440-62-2	6010C	mg/kg	37.6		38.3		1.84
Metals	Zinc	7440-66-6	6010C	mg/kg	59.2		64.4		8.41
Metals	Zirconium	7440-67-7	6010C	mg/kg	2.93	J	2.94	J	0.34
Moisture Content	Moisture	MOIST	160.3M	%	1.3		2.8		73.17
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	0.71	J	1.7	UJ	200.00
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	17	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.8	J	1.7	UJ	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	UJ	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	100	J	46	J	73.97
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	0.81	J	1.7	UJ	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.7	U	1.7	U	--

				Location	5A_DG-871		5A_DG-871		RPD
				Sample Name:	SL-1271-SA5A-SB-0.0-0.5		SL-871-SA5A-SB-0.0-0.5		
				Sample Date	06/06/2013		06/06/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.62		6.45		2.60
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.1	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.1	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	6.2		7.2	J	14.93
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	15		15	J	0.00
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.1	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-871		5A_DG-871		RPD
				Sample Name:	SL-1271-SA5A-SB-0.0-0.5		SL-871-SA5A-SB-0.0-0.5		
				Sample Date	06/06/2013		06/06/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-838		5A_DG-838		RPD
				Sample Name:	SL-1238-SA5A-SB-0.0-0.5		SL-838-SA5A-SB-0.0-0.5		
				Sample Date	05/31/2013		05/31/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	4.03	J	1.87	J	73.22
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	0.622	J	0.275	J	77.37
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.2	UJ	5.23	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.0997	J	0.0479	J	70.19
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.2	UJ	5.23	UJ	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.675	J	0.495	J	30.77
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.204	J	5.23	UJ	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.762	J	0.67	J	12.85
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.594	J	0.564	J	5.18
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	0.529	J	5.23	UJ	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.2	U	5.23	U	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.194	J	5.23	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	0.451	J	5.23	UJ	200.00
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.04	U	1.05	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.292	J	1.05	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	49	J	24.5	J	66.67
Dioxins	OCDF	39001-02-0	1613B	ng/kg	1.15	J	10.5	UJ	200.00
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.375		0.141		90.70
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.015	J	0.0123	J	19.78
Metals	Aluminum	7429-90-5	6010C	mg/kg	15300		15300		0.00
Metals	Antimony	7440-36-0	6010C	mg/kg	4.09	UJ	4.03	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	4.38		4.41		0.68
Metals	Barium	7440-39-3	6010C	mg/kg	106		103		2.87
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.627	J	0.616	J	1.77
Metals	Boron	7440-42-8	6010C	mg/kg	3.26	J	3.37	J	3.32
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.364	J	0.321	J	12.55
Metals	Calcium	7440-70-2	6010C	mg/kg	1550	J	1590	J	2.55
Metals	Chromium	7440-47-3	6010C	mg/kg	21.8		21.7		0.46
Metals	Cobalt	7440-48-4	6010C	mg/kg	6.49		6.05		7.02
Metals	Copper	7440-50-8	6010C	mg/kg	12.4		11.9		4.12
Metals	Iron	7439-89-6	6010C	mg/kg	21100		20800		1.43
Metals	Lead	7439-92-1	6010C	mg/kg	9.58		6.56		37.42
Metals	Lithium	7439-93-2	6010C	mg/kg	19.5		19.3		1.03
Metals	Magnesium	7439-95-4	6010C	mg/kg	4070		4100		0.73
Metals	Manganese	7439-96-5	6010C	mg/kg	372		281		27.87
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.04	U	2.01	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13.5	J	12.9	J	4.55
Metals	Phosphorus	7723-14-0	6010C	mg/kg	423	J	401	J	5.34
Metals	Potassium	7440-09-7	6010C	mg/kg	4040		4040		0.00
Metals	Selenium	7782-49-2	6020A	mg/kg	0.103	J	0.15	J	37.15
Metals	Silver	7440-22-4	6020A	mg/kg	0.0416	J	0.0398	J	4.42
Metals	Sodium	7440-23-5	6010C	mg/kg	65.5	J	68.6	J	4.62
Metals	Strontium	7440-24-6	6020A	mg/kg	19.6	J	18.5	J	5.77
Metals	Thallium	7440-28-0	6020A	mg/kg	0.268		0.261		2.65
Metals	Tin	7440-31-5	6010C	mg/kg	10.2	U	10.1	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1150		1140		0.87
Metals	Vanadium	7440-62-2	6010C	mg/kg	36.4		35.8		1.66
Metals	Zinc	7440-66-6	6010C	mg/kg	60.1		58.3		3.04
Metals	Zirconium	7440-67-7	6010C	mg/kg	3.72	J	3.32	J	11.36
Moisture Content	Moisture	MOIST	160.3M	%	4.1		4.5		9.30
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.1	J	0.79	J	32.80
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	0.96	J	1.7	UJ	200.00
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.4	J	0.48	J	97.87
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	19	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	0.7	J	1.7	UJ	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.4	J	1.1	J	24.00
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.2	J	1.7	UJ	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.7	U	1.7	U	--

				Location	5A_DG-838		5A_DG-838		RPD
				Sample Name:	SL-1238-SA5A-SB-0.0-0.5		SL-838-SA5A-SB-0.0-0.5		
				Sample Date	05/31/2013		05/31/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	5.24		5.45		3.93
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.2	U	5.2	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.2	U	5.2	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	11		7.3	J	40.44
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	21		18	J	15.38
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.2	U	5.2	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-838		5A_DG-838		RPD
				Sample Name:	SL-1238-SA5A-SB-0.0-0.5		SL-838-SA5A-SB-0.0-0.5		
				Sample Date	05/31/2013		05/31/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-837		5A_DG-837		RPD
				Sample Name:	SL-1237-SA5A-SB-4.5-5.5		SL-837-SA5A-SB-4.5-5.5		
				Sample Date	05/30/2013		05/30/2013		
				Start Depth:	4.5		4.5		
				End Depth:	5.5		5.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	42.3	J	5.07	J	157.19
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	11.1	J	1.28	J	158.64
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	1.08	J	0.2	J	137.50
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.625	J	0.0963	J	146.60
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	0.342	J	5.44	UJ	200.00
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	1.27	J	0.164	J	154.25
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.56	J	5.44	UJ	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	1.59	J	0.164	J	162.60
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.143	J	5.44	UJ	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	0.261	J	0.0494	J	136.34
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	0.39	J	0.0674	J	141.06
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.529	J	5.44	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	0.171	J	5.44	UJ	200.00
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.0465	J	1.09	UJ	200.00
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	1.02	U	1.09	U	--
Dioxins	OCDD	3268-87-9	1613B	ng/kg	472	J	65.8	J	151.06
Dioxins	OCDF	39001-02-0	1613B	ng/kg	44.4	J	5.84	J	153.50
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	1.65		0.142		168.30
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0112	J	0.0153	J	30.94
Metals	Aluminum	7429-90-5	6010C	mg/kg	23500		33700		35.66
Metals	Antimony	7440-36-0	6010C	mg/kg	4.1	UJ	4.24	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	7.84	J	3.74	J	70.81
Metals	Barium	7440-39-3	6010C	mg/kg	102	J	171	J	50.55
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.884	J	1.66	J	61.01
Metals	Boron	7440-42-8	6010C	mg/kg	1.63	J	10.6	UJ	200.00
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.187	J	0.0392	J	130.68
Metals	Calcium	7440-70-2	6010C	mg/kg	2710	J	5340	J	65.34
Metals	Chromium	7440-47-3	6010C	mg/kg	23.5	J	51.2	J	74.16
Metals	Cobalt	7440-48-4	6010C	mg/kg	6.77	J	13.1	J	63.71
Metals	Copper	7440-50-8	6010C	mg/kg	10.6	J	28.7	J	92.11
Metals	Iron	7439-89-6	6010C	mg/kg	25900		43000		49.64
Metals	Lead	7439-92-1	6010C	mg/kg	8.69	J	18.6	J	72.63
Metals	Lithium	7439-93-2	6010C	mg/kg	41		61		39.22
Metals	Magnesium	7439-95-4	6010C	mg/kg	4930	J	10000	J	67.92
Metals	Manganese	7439-96-5	6010C	mg/kg	299	J	518	J	53.61
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.05	U	2.12	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13.5	J	27	J	66.67
Metals	Phosphorus	7723-14-0	6010C	mg/kg	323		464		35.83
Metals	Potassium	7440-09-7	6010C	mg/kg	1930	J	2000	J	3.56
Metals	Selenium	7782-49-2	6020A	mg/kg	0.126	J	0.149	J	16.73
Metals	Silver	7440-22-4	6020A	mg/kg	0.0464	J	0.0457	J	1.52
Metals	Sodium	7440-23-5	6010C	mg/kg	123		190		42.81
Metals	Strontium	7440-24-6	6020A	mg/kg	23.4	J	45.7	J	64.54
Metals	Thallium	7440-28-0	6020A	mg/kg	0.274		0.309		12.01
Metals	Tin	7440-31-5	6010C	mg/kg	10.3	U	10.6	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1240		1460		16.30
Metals	Vanadium	7440-62-2	6010C	mg/kg	47.2	J	82.3	J	54.21
Metals	Zinc	7440-66-6	6010C	mg/kg	52.7		80.6		41.86
Metals	Zirconium	7440-67-7	6010C	mg/kg	5.05	J	6.9		30.96
Moisture Content	Moisture	MOIST	160.3M	%	5.3		8.4		45.26
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	19	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	UJ	31	J	200.00
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	20	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.58	J	1.8	UJ	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	20	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	20	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	20	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	20	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.8	U	1.8	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.8	U	1.8	U	--

				Location	5A_DG-837		5A_DG-837		RPD
				Sample Name:	SL-1237-SA5A-SB-4.5-5.5		SL-837-SA5A-SB-4.5-5.5		
				Sample Date	05/30/2013		05/30/2013		
				Start Depth:	4.5		4.5		
				End Depth:	5.5		5.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg					--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg					--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg					--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg					--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg					--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg					--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg					--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg					--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg					--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.93		6.83		1.45
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.3	U	5.5	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.3	U	5.5	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	3	J	3.7	J	20.90
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	7.9	J	10	J	23.46
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.3	U	5.5	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	1.1	U	1.1	U	--

				Location	5A_DG-837		5A_DG-837		RPD
				Sample Name:	SL-1237-SA5A-SB-4.5-5.5		SL-837-SA5A-SB-4.5-5.5		
				Sample Date	05/30/2013		05/30/2013		
				Start Depth:	4.5		4.5		
				End Depth:	5.5		5.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-521		5A_DG-521		RPD
				Sample Name:	SL-821-SA5A-SB-11.0-12.0		SL-521-SA5A-SB-11.0-12.0		
				Sample Date	11/14/2013		11/14/2013		
				Start Depth:	11		11		
				End Depth:	12		12		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg	16	U	15	U	--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	5.34	U	5.31	U	--
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	5.34	U	5.31	U	--
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	5.34	U	5.31	U	--
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.256	J	5.31	UJ	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.398	J	0.409	J	2.73
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.34	U	5.31	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.34	UJ	5.31	UJ	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.107	J	1.06	UJ	200.00
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.0519	J	0.0626	J	18.69
Dioxins	OCDD	3268-87-9	1613B	ng/kg	1.55	J	2.27	J	37.70
Dioxins	OCDF	39001-02-0	1613B	ng/kg	10.7	U	10.6	U	--
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.422		0.0203		181.64
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg	14000	J	13000		7.41
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg	0.33	J	1.3	J	119.02
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0179	U	0.0171	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	17100	J	15500	J	9.82
Metals	Antimony	7440-36-0	6010C	mg/kg	4.27	UJ	4.36	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	4.68		4.3	J	8.46
Metals	Barium	7440-39-3	6010C	mg/kg	123		104		16.74
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.636	J	0.562	J	12.35
Metals	Boron	7440-42-8	6010C	mg/kg	3.65	J	3.94	J	7.64
Metals	Cadmium	7440-43-9	6010C	mg/kg	1.07	U	1.09	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2330	J	2250	J	3.49
Metals	Chromium	7440-47-3	6010C	mg/kg	18.4		16.6		10.29
Metals	Cobalt	7440-48-4	6010C	mg/kg	5.66		5.48		3.23
Metals	Copper	7440-50-8	6010C	mg/kg	12.2		9.57		24.16
Metals	Iron	7439-89-6	6010C	mg/kg	20000		18600		7.25
Metals	Lead	7439-92-1	6010C	mg/kg	5.83		5.84		0.17
Metals	Lithium	7439-93-2	6010C	mg/kg	22.2		21.2		4.61
Metals	Magnesium	7439-95-4	6010C	mg/kg	4170		3820		8.76
Metals	Manganese	7439-96-5	6010C	mg/kg	326		361		10.19
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.14	U	2.18	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	12.1		11		9.52
Metals	Phosphorus	7723-14-0	6010C	mg/kg	396	J	340	J	15.22
Metals	Potassium	7440-09-7	6010C	mg/kg	3600	J	3210	J	11.45
Metals	Selenium	7782-49-2	6020A	mg/kg	0.157	J	0.153	J	2.58
Metals	Silver	7440-22-4	6020A	mg/kg	0.0344	J	0.0438	J	24.04
Metals	Sodium	7440-23-5	6010C	mg/kg	120		117		2.53
Metals	Strontium	7440-24-6	6020A	mg/kg	24.4		22.1		9.89
Metals	Thallium	7440-28-0	6020A	mg/kg	0.277		0.254		8.66
Metals	Tin	7440-31-5	6010C	mg/kg	10.7	U	10.9	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1080		1040		3.77
Metals	Vanadium	7440-62-2	6010C	mg/kg	34		30.9		9.55
Metals	Zinc	7440-66-6	6010C	mg/kg	57.7		53.7		7.18
Metals	Zirconium	7440-67-7	6010C	mg/kg	4.14	J	3.91	J	5.71
Moisture Content	Moisture	MOIST	160.3M	%	10		9.2		8.33
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.9	UJ	1.2	J	200.00
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.9	UJ	1.4	J	200.00
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	0.75	J	1.9	J	86.79
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	19	UJ	19	UJ	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	20	UJ	20	UJ	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	20	U	20	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.61	J	0.65	J	6.35
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	20	U	20	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	20	U	20	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	20	U	20	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	20	UJ	20	UJ	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg	22	U	22	U	--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	0.94	J	1.3	J	32.14
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.9	U	1.8	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.9	U	1.8	U	--

				Location	5A_DG-521		5A_DG-521		RPD
				Sample Name:	SL-821-SA5A-SB-11.0-12.0		SL-521-SA5A-SB-11.0-12.0		
				Sample Date	11/14/2013		11/14/2013		
				Start Depth:	11		11		
				End Depth:	12		12		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	19	U	18	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	36	U	36	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	36	U	36	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	36	U	36	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.89		7.86		13.15
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.6	U	5.5	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.6	U	5.5	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	2.5	J	5.7	J	78.05
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	5.4	J	12	J	75.86
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.6	U	5.5	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	1.1	U	1.1	U	--

				Location	5A_DG-521		5A_DG-521		RPD
				Sample Name:	SL-821-SA5A-SB-11.0-12.0		SL-521-SA5A-SB-11.0-12.0		
				Sample Date	11/14/2013		11/14/2013		
				Start Depth:	11		11		
				End Depth:	12		12		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg	5	U	5	U	--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg	5	U	5	U	--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg	5	U	5	U	--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg	5	U	5	U	--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg	5	U	5	U	--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg	5	U	5	U	--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg	5	U	5	U	--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg	5	U	5	U	--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg	5	U	5	U	--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg	5	U	5	U	--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg	5	U	5	U	--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg	5	U	5	U	--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg	5	U	5	U	--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg	5	U	5	U	--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg	5	U	5	U	--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg	5	U	5	U	--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg	5	U	5	U	--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg	5	U	5	U	--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg	5	U	5	U	--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg	5	U	5	U	--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg	5	U	5	U	--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg	5	U	5	U	--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg	5	U	5	U	--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg	5	J	11	UJ	200.00
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg	5	U	5	U	--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg	11	U	11	U	--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg	5	U	5	U	--
VOC	2-Hexanone	591-78-6	8260B	µg/kg	11	U	11	U	--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg	5	U	5	U	--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg	5	U	5	U	--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg	11	U	11	U	--
VOC	Acetone	67-64-1	8260B	µg/kg	36		32		11.76
VOC	Acrolein	107-02-8	8260B	µg/kg	110	U	110	U	--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg	22	U	21	U	--
VOC	Benzene	71-43-2	8260B	µg/kg	5	U	5	U	--
VOC	Bromobenzene	108-86-1	8260B	µg/kg	5	U	5	U	--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg	5	U	5	U	--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg	5	U	5	U	--
VOC	Bromoform	75-25-2	8260B	µg/kg	5	U	5	U	--
VOC	Bromomethane	74-83-9	8260B	µg/kg	5	U	5	U	--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg	5	U	5	U	--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg	5	U	5	U	--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg	5	U	5	U	--
VOC	Chloroethane	75-00-3	8260B	µg/kg	5	U	5	U	--
VOC	Chloroform	67-66-3	8260B	µg/kg	5	U	5	U	--
VOC	Chloromethane	74-87-3	8260B	µg/kg	5	U	5	U	--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg	5	U	5	UJ	--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg	5	U	5	U	--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg	5	U	5	U	--
VOC	Cymene	99-87-6	8260B	µg/kg	5	U	5	U	--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg	5	U	5	U	--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg	5	U	5	U	--
VOC	Dibromomethane	74-95-3	8260B	µg/kg	5	U	5	U	--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg	5	U	5	U	--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg	5	U	5	U	--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg	5	U	5	U	--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg	5	U	5	U	--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg	5	U	5	U	--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg	5	U	5	U	--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg	5	U	5	U	--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg	5	U	5	U	--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg	5	U	5	U	--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg	5	U	5	U	--
VOC	o-Xylene	95-47-6	8260B	µg/kg	5	U	5	U	--
VOC	Styrene	100-42-5	8260B	µg/kg	5	U	5	U	--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg	5	U	5	U	--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg	5	U	5	U	--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg	5	U	5	U	--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg	54	U	53	U	--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg	5	U	5	U	--
VOC	Toluene	108-88-3	8260B	µg/kg	5	U	5	U	--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg	5	U	5	U	--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg	5	U	5	U	--
VOC	Trichloroethene	79-01-6	8260B	µg/kg	5	U	5	U	--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg	5	U	5	U	--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg	11	U	11	U	--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg	5	U	5	U	--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-628		5A_DG-628		RPD
				Sample Name:	SL-928-SA5A-SB-0.0-0.5		SL-628-SA5A-SB-0.0-0.5		
				Sample Date	11/12/2013		11/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg	1000	U	1000	U	--
Alcohols	Ethanol	64-17-5	8015C	µg/kg	1000	U	1000	U	--
Alcohols	Methanol	67-56-1	8015C	µg/kg	1000	UJ	480	J	200.00
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	13.9	J	30.8	J	75.62
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	1.5	J	3.47	J	79.28
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	0.766	J	4.95	UJ	200.00
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.574	J	0.327	J	54.83
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	0.703	J	4.95	UJ	200.00
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.94	J	1.03	J	9.14
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.724	J	0.262	J	93.71
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.746	J	0.654	J	13.14
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.846	J	4.95	UJ	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	1.87	J	0.922	J	67.91
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	0.86	J	4.95	UJ	200.00
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.983	J	4.95	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	1.1	J	0.389	J	95.50
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.992	UJ	0.99	UJ	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.355	J	0.99	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	186		297	J	45.96
Dioxins	OCDF	39001-02-0	1613B	ng/kg	4.35	J	8.55	J	65.12
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	1.11		0.894		21.56
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.181		0.247		30.84
Metals	Aluminum	7429-90-5	6010C	mg/kg	10100	J	10400	J	2.93
Metals	Antimony	7440-36-0	6010C	mg/kg	4.02	UJ	3.99	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	2.47	J	2.28	J	8.00
Metals	Barium	7440-39-3	6010C	mg/kg	84.4	J	75.6	J	11.00
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.27	J	0.31	J	13.79
Metals	Boron	7440-42-8	6010C	mg/kg	3.17	J	4.03	J	23.89
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.471	J	0.514	J	8.73
Metals	Calcium	7440-70-2	6010C	mg/kg	7670	J	6550	J	15.75
Metals	Chromium	7440-47-3	6010C	mg/kg	12.9		14.2		9.59
Metals	Cobalt	7440-48-4	6010C	mg/kg	3.23		3.31		2.45
Metals	Copper	7440-50-8	6010C	mg/kg	6.53	J	10.6	J	47.52
Metals	Iron	7439-89-6	6010C	mg/kg	18500	J	17800	J	3.86
Metals	Lead	7439-92-1	6010C	mg/kg	9.34		7.32		24.25
Metals	Lithium	7439-93-2	6010C	mg/kg	23.6	J	24.2	J	2.51
Metals	Magnesium	7439-95-4	6010C	mg/kg	3770	J	3750	J	0.53
Metals	Manganese	7439-96-5	6010C	mg/kg	263	J	266	J	1.13
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.01	UJ	1.99	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	6		6.77		12.06
Metals	Phosphorus	7723-14-0	6010C	mg/kg	393	J	397	J	1.01
Metals	Potassium	7440-09-7	6010C	mg/kg	3300	J	3340	J	1.20
Metals	Selenium	7782-49-2	6020A	mg/kg	0.402	UJ	0.126	J	200.00
Metals	Silver	7440-22-4	6020A	mg/kg	0.0308	J	0.0309	J	0.32
Metals	Sodium	7440-23-5	6010C	mg/kg	182		130		33.33
Metals	Strontium	7440-24-6	6020A	mg/kg	21	J	18.1	J	14.83
Metals	Thallium	7440-28-0	6020A	mg/kg	0.237		0.227		4.31
Metals	Tin	7440-31-5	6010C	mg/kg	10.1	U	9.97	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1110		1100		0.90
Metals	Vanadium	7440-62-2	6010C	mg/kg	26.8	J	25.5	J	4.97
Metals	Zinc	7440-66-6	6010C	mg/kg	100	J	108	J	7.69
Metals	Zirconium	7440-67-7	6010C	mg/kg	2.71	J	2.58	J	4.91
Moisture Content	Moisture	MOIST	160.3M	%	2.5		1.7		38.10
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	UJ	0.41	J	200.00
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	UJ	0.56	J	200.00
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	UJ	2.6	J	200.00
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	UJ	3.5	J	200.00
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.7	UJ	8.5	J	200.00
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	17	UJ	3.7	J	200.00
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	UJ	3.5	J	200.00
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	UJ	2.3	J	200.00
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.7	UJ	5.7	J	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	UJ	1	J	200.00
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.7	UJ	7.9	J	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	UJ	2.5	J	200.00
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	UJ	3.3	J	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.7	UJ	6.1	J	200.00

				Location	5A_DG-628		5A_DG-628		RPD
				Sample Name:	SL-928-SA5A-SB-0.0-0.5		SL-628-SA5A-SB-0.0-0.5		
				Sample Date	11/12/2013		11/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	120	J	23	J	135.66
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	33	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	33	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	33	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	7.76		8.25		6.12
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.1	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.1	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	3.4	J	11	J	105.56
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	8.9	J	40	J	127.20
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.1	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-628		5A_DG-628		RPD
				Sample Name:	SL-928-SA5A-SB-0.0-0.5		SL-628-SA5A-SB-0.0-0.5		
				Sample Date	11/12/2013		11/12/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-654		5A_DG-654		RPD
				Sample Name:	SL-954-SA5A-SB-3.0-4.0		SL-654-SA5A-SB-3.0-4.0		
				Sample Date	11/13/2013		11/13/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	2.72	J	7.49	J	93.44
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	0.705	J	1.25	J	55.75
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	0.304	J	4.92	UJ	200.00
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.24	J	0.145	J	49.35
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	0.319	J	4.92	U	200.00
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.39	J	0.404	J	3.53
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	5	U	4.92	U	--
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.417	J	0.44	J	5.37
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5	U	4.92	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	0.385	J	0.52	J	29.83
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	5	UJ	4.92	UJ	--
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.296	J	4.92	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5	U	4.92	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1	U	0.985	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	1	UJ	0.0817	J	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	27.7	J	76.1	J	93.26
Dioxins	OCDF	39001-02-0	1613B	ng/kg	1.79	J	3.27	J	58.50
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.22		0.212		3.70
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0168	U	0.0169	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	19800		19900		0.50
Metals	Antimony	7440-36-0	6010C	mg/kg	4.1	UJ	4.14	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	6.77		6.45		4.84
Metals	Barium	7440-39-3	6010C	mg/kg	85.5		98.3		13.93
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.68	J	0.687	J	1.02
Metals	Boron	7440-42-8	6010C	mg/kg	2.42	J	2.32	J	4.22
Metals	Cadmium	7440-43-9	6010C	mg/kg	1.02	UJ	0.0962	J	200.00
Metals	Calcium	7440-70-2	6010C	mg/kg	2960		3220		8.41
Metals	Chromium	7440-47-3	6010C	mg/kg	23.5		23.2		1.28
Metals	Cobalt	7440-48-4	6010C	mg/kg	6.19		6.3		1.76
Metals	Copper	7440-50-8	6010C	mg/kg	10		11.4		13.08
Metals	Iron	7439-89-6	6010C	mg/kg	25800	J	26800	J	3.80
Metals	Lead	7439-92-1	6010C	mg/kg	7.46		7.63		2.25
Metals	Lithium	7439-93-2	6010C	mg/kg	28.6		30.3		5.77
Metals	Magnesium	7439-95-4	6010C	mg/kg	5490		5770		4.97
Metals	Manganese	7439-96-5	6010C	mg/kg	297		337		12.62
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.05	U	2.07	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13.4		14.4		7.19
Metals	Phosphorus	7723-14-0	6010C	mg/kg	370		448		19.07
Metals	Potassium	7440-09-7	6010C	mg/kg	2340		2880		20.69
Metals	Selenium	7782-49-2	6020A	mg/kg	0.198	J	0.194	J	2.04
Metals	Silver	7440-22-4	6020A	mg/kg	0.049	J	0.0393	J	21.97
Metals	Sodium	7440-23-5	6010C	mg/kg	102		98.7	J	3.29
Metals	Strontium	7440-24-6	6020A	mg/kg	21.5	J	20.4	J	5.25
Metals	Thallium	7440-28-0	6020A	mg/kg	0.289		0.3		3.74
Metals	Tin	7440-31-5	6010C	mg/kg	10.2	U	10.3	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1270		1390		9.02
Metals	Vanadium	7440-62-2	6010C	mg/kg	48.8		46.8		4.18
Metals	Zinc	7440-66-6	6010C	mg/kg	55.8		60.7		8.41
Metals	Zirconium	7440-67-7	6010C	mg/kg	4.12	J	4.64	J	11.87
Moisture Content	Moisture	MOIST	160.3M	%	4.3		3.3		26.32
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	UJ	0.42	J	200.00
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	0.84	J	4.1	J	131.98
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.2	J	6.2	J	135.14
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	2.8	J	11	J	118.84
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	UJ	7.1	J	200.00
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.1	J	4.5	J	121.43
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	UJ	3.6	J	200.00
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.6	J	6.1	J	116.88
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	UJ	1.5	J	200.00
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.1	J	4.4	J	120.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.1	J	5.4	J	132.31
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	UJ	1.6	J	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	0.9	J	3.9	J	125.00

				Location	5A_DG-654		5A_DG-654		RPD
				Sample Name:	SL-954-SA5A-SB-3.0-4.0		SL-654-SA5A-SB-3.0-4.0		
				Sample Date	11/13/2013		11/13/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	18	U	18	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	34	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	7.92		8.18		3.23
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	5.2	U	5.1	U	--
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	10	U	10	U	--
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.2	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	1.1	U	1.1	U	--

				Location	5A_DG-654		5A_DG-654		RPD
				Sample Name:	SL-954-SA5A-SB-3.0-4.0		SL-654-SA5A-SB-3.0-4.0		
				Sample Date	11/13/2013		11/13/2013		
				Start Depth:	3		3		
				End Depth:	4		4		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-686		5A_DG-686		RPD
				Sample Name:	SL-986-SA5A-SB-0.0-0.5		SL-686-SA5A-SB-0.0-0.5		
				Sample Date	11/22/2013		11/22/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	0.584	J	5.89	J	163.92
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	5.15	UJ	1.32	J	200.00
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	5.15	U	5.08	U	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.244	J	0.116	J	71.11
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	5.15	UJ	5.08	UJ	--
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	5.15	U	0.317	J	200.00
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	0.353	J	0.138	J	87.58
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	0.319	J	0.364	J	13.18
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.389	J	0.208	J	60.64
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	0.486	J	5.08	UJ	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	0.385	J	5.08	UJ	200.00
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	0.368	J	0.155	J	81.45
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.15	UJ	5.08	UJ	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.128	J	0.0856	J	39.70
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.106	J	1.02	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	3.25	J	61.6	J	179.95
Dioxins	OCDF	39001-02-0	1613B	ng/kg	10.3	UJ	5.97	J	200.00
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.174		0.168		3.51
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg	240	U	180	U	--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg	1.8	U	1.7	U	--
Herbicides	2,4-D	94-75-7	8151A	µg/kg	37	U	36	U	--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg	18	U	17	U	--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg	12	U	12	U	--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg	18	U	17	U	--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg	25	U	24	U	--
Herbicides	MCPA	94-74-6	8151A	µg/kg	2600	U	2500	U	--
Herbicides	MCPP	93-65-2	8151A	µg/kg	2600	U	2500	U	--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg	1.8	U	1.7	U	--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0164	U	0.0168	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	19000		16800		12.29
Metals	Antimony	7440-36-0	6010C	mg/kg	3.99	UJ	4.06	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	5.35		4.79		11.05
Metals	Barium	7440-39-3	6010C	mg/kg	105		98.9		5.98
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.715	J	0.591	J	18.99
Metals	Boron	7440-42-8	6010C	mg/kg	4.18	J	4.7	J	11.71
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.998	U	1.01	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2170		2680		21.03
Metals	Chromium	7440-47-3	6010C	mg/kg	23.9		21.7		9.65
Metals	Cobalt	7440-48-4	6010C	mg/kg	6.3		5.61		11.59
Metals	Copper	7440-50-8	6010C	mg/kg	15.4		15.2		1.31
Metals	Iron	7439-89-6	6010C	mg/kg	22700	J	22100	J	2.68
Metals	Lead	7439-92-1	6010C	mg/kg	8.45		5.87		36.03
Metals	Lithium	7439-93-2	6010C	mg/kg	20.2		23.4		14.68
Metals	Magnesium	7439-95-4	6010C	mg/kg	4300		4710		9.10
Metals	Manganese	7439-96-5	6010C	mg/kg	321		316		1.57
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2	UJ	2.03	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	13		12.3		5.53
Metals	Phosphorus	7723-14-0	6010C	mg/kg	279	J	387	J	32.43
Metals	Potassium	7440-09-7	6010C	mg/kg	3110	J	3410	J	9.20
Metals	Selenium	7782-49-2	6020A	mg/kg	0.137	J	0.162	J	16.72
Metals	Silver	7440-22-4	6020A	mg/kg	0.0333	J	0.039	J	15.77
Metals	Sodium	7440-23-5	6010C	mg/kg	171		124		31.86
Metals	Strontium	7440-24-6	6020A	mg/kg	21.7		20.4		6.18
Metals	Thallium	7440-28-0	6020A	mg/kg	0.282		0.274		2.88
Metals	Tin	7440-31-5	6010C	mg/kg	9.98	U	10.1	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1290		1260		2.35
Metals	Vanadium	7440-62-2	6010C	mg/kg	43.1		38.5		11.27
Metals	Zinc	7440-66-6	6010C	mg/kg	48.2		53.6		10.61
Metals	Zirconium	7440-67-7	6010C	mg/kg	2.95	J	2.46	J	18.11
Moisture Content	Moisture	MOIST	160.3M	%	3.7		2.4		42.62
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	18	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	1.7	UJ	0.47	J	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	19	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	1.7	U	1.7	U	--

				Location	5A_DG-686		5A_DG-686		RPD
				Sample Name:	SL-986-SA5A-SB-0.0-0.5		SL-686-SA5A-SB-0.0-0.5		
				Sample Date	11/22/2013		11/22/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	34	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg	3.2	J	1.7	UJ	200.00
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg	1.5	J	1.7	UJ	200.00
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg	6.7	J	1.7	UJ	200.00
Pesticides	Aldrin	309-00-2	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg	1.6	J	1.9	UJ	200.00
Pesticides	Chlordane	57-74-9	8081B	µg/kg	18	U	17	U	--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg	0.37	J	1.7	UJ	200.00
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin	72-20-8	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg	1.9	U	1.8	U	--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg	0.86	U	0.84	U	--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg	6.9	U	6.8	U	--
Pesticides	Mirex	2385-85-5	8081B	µg/kg	1.8	U	1.7	U	--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg	34	U	33	U	--
pH	pH	pH	9045M	pH	6.62		7.09		6.86
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	26	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	26	UJ	2.1	J	200.00
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	130	J	32	J	120.99
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	320	J	89	J	112.96
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	26	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-686		5A_DG-686		RPD
				Sample Name:	SL-986-SA5A-SB-0.0-0.5		SL-686-SA5A-SB-0.0-0.5		
				Sample Date	11/22/2013		11/22/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-708		5A_DG-708		RPD
				Sample Name:	SL-1008-SA5A-SB-0.0-0.5		SL-708-SA5A-SB-0.0-0.5		
				Sample Date	11/19/2013		11/19/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	80.9	J	3.31	J	184.28
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	18.6	J	0.903	J	181.48
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	2.53	J	5.07	UJ	200.00
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	0.859	J	5.07	UJ	200.00
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	0.991	J	5.07	UJ	200.00
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	3.23	J	0.28	J	168.09
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	1.05	J	5.07	UJ	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	1.78	J	0.346	J	134.90
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	5.05	UJ	5.07	UJ	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	1.94	J	5.07	UJ	200.00
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	0.602	J	5.07	UJ	200.00
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	1.33	J	5.07	UJ	200.00
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	0.92	J	5.07	UJ	200.00
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.16	J	0.142	J	156.37
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.462	J	1.01	UJ	200.00
Dioxins	OCDD	3268-87-9	1613B	ng/kg	1140	J	34.9	J	188.12
Dioxins	OCDF	39001-02-0	1613B	ng/kg	44.9	J	1.67	J	185.66
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	2.68		0.325		156.74
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0441	J	0.0113	J	118.41
Metals	Aluminum	7429-90-5	6010C	mg/kg	10400		16200		43.61
Metals	Antimony	7440-36-0	6010C	mg/kg	4.02	UJ	4.12	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	2.99	J	4.91		48.61
Metals	Barium	7440-39-3	6010C	mg/kg	95.6		99.4		3.90
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.409	J	0.634	J	43.14
Metals	Boron	7440-42-8	6010C	mg/kg	4.22	J	4.43	J	4.86
Metals	Cadmium	7440-43-9	6010C	mg/kg	0.495	J	0.308	J	46.58
Metals	Calcium	7440-70-2	6010C	mg/kg	2720		1910		34.99
Metals	Chromium	7440-47-3	6010C	mg/kg	16.5		19.2		15.13
Metals	Cobalt	7440-48-4	6010C	mg/kg	4.35		5.65		26.00
Metals	Copper	7440-50-8	6010C	mg/kg	9.48		8.45		11.49
Metals	Iron	7439-89-6	6010C	mg/kg	15700		20200		25.07
Metals	Lead	7439-92-1	6010C	mg/kg	17.6	J	7.05	J	85.60
Metals	Lithium	7439-93-2	6010C	mg/kg	14.8		19.9		29.39
Metals	Magnesium	7439-95-4	6010C	mg/kg	3370		3950		15.85
Metals	Manganese	7439-96-5	6010C	mg/kg	255		311		19.79
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.01	UJ	2.06	UJ	--
Metals	Nickel	7440-02-0	6010C	mg/kg	7.6		8.91		15.87
Metals	Phosphorus	7723-14-0	6010C	mg/kg	363		229		45.27
Metals	Potassium	7440-09-7	6010C	mg/kg	3090		2750		11.64
Metals	Selenium	7782-49-2	6020A	mg/kg	0.152	J	0.412	UJ	200.00
Metals	Silver	7440-22-4	6020A	mg/kg	1.38	J	0.104	J	171.97
Metals	Sodium	7440-23-5	6010C	mg/kg	61.6	J	71.2	J	14.46
Metals	Strontium	7440-24-6	6020A	mg/kg	22.2	J	18.6	J	17.65
Metals	Thallium	7440-28-0	6020A	mg/kg	0.221		0.28		23.55
Metals	Tin	7440-31-5	6010C	mg/kg	10	U	10.3	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	860		1110		25.38
Metals	Vanadium	7440-62-2	6010C	mg/kg	28		36.5		26.36
Metals	Zinc	7440-66-6	6010C	mg/kg	82.9		51.6		46.54
Metals	Zirconium	7440-67-7	6010C	mg/kg	1.35	J	1.98	J	37.84
Moisture Content	Moisture	MOIST	160.3M	%	1.4		3.8		92.31
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	0.49	J	1.7	UJ	200.00
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	0.72	J	1.7	UJ	200.00
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	0.91	J	1.7	UJ	200.00
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	31	J	1.1	J	186.29
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	17	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.1	J	1.7	UJ	200.00
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	12	J	18	UJ	200.00
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	2	J	1.7	UJ	200.00
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	2.2	J	1.7	UJ	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.9	J	1.7	UJ	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	2.3	J	1.7	UJ	200.00

				Location	5A_DG-708		5A_DG-708		RPD
				Sample Name:	SL-1008-SA5A-SB-0.0-0.5		SL-708-SA5A-SB-0.0-0.5		
				Sample Date	11/19/2013		11/19/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	18	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	33	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	33	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	16	J	34	UJ	200.00
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg	1.1	J	1.8	UJ	200.00
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg	87	J	8	J	166.32
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg	52	J	11	J	130.16
Pesticides	Aldrin	309-00-2	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg	1.9	U	2	U	--
Pesticides	Chlordane	57-74-9	8081B	µg/kg	17	U	18	U	--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg	1.5	J	1.8	UJ	200.00
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg	1.7	U	1.8	U	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg	0.46	J	1.8	UJ	200.00
Pesticides	Endrin	72-20-8	8081B	µg/kg	6.2	U	1.8	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg	1.7	U	1.8	U	--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg	1.8	U	1.9	U	--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg	0.84	U	0.86	U	--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg	6.8	U	6.9	U	--
Pesticides	Mirex	2385-85-5	8081B	µg/kg	1.7	U	1.8	U	--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg	33	U	34	U	--
pH	pH	pH	9045M	pH	6.75		6.81		0.88
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.1	U	5.2	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.1	U	5.2	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	4.2	J	3.3	J	24.00
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	9.4	J	9	J	4.35
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.1	U	5.2	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-708		5A_DG-708		RPD
				Sample Name:	SL-1008-SA5A-SB-0.0-0.5		SL-708-SA5A-SB-0.0-0.5		
				Sample Date	11/19/2013		11/19/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-709		5A_DG-709		RPD
				Sample Name:	SL-1009-SA5A-SB-4.0-5.0		SL-709-SA5A-SB-4.0-5.0		
				Sample Date	11/18/2013		11/18/2013		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	6.36		6.49		2.02
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	1.39	J	1.7	J	20.06
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	4.99	UJ	4.99	UJ	--
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	0.0855	J	0.111	J	25.95
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	0.266	J	0.391	J	38.05
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	4.99	UJ	0.177	J	200.00
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	0.133	J	0.0932	J	35.19
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	4.99	U	4.99	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.998	U	0.999	U	--
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.998	U	0.999	U	--
Dioxins	OCDD	3268-87-9	1613B	ng/kg	95.2		82.8		13.93
Dioxins	OCDF	39001-02-0	1613B	ng/kg	3.32	J	4	J	18.58
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	0.126		0.165		26.80
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg					--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg					--
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0166	U	0.0168	U	--
Metals	Aluminum	7429-90-5	6010C	mg/kg	13300		15000		12.01
Metals	Antimony	7440-36-0	6010C	mg/kg	4	UJ	4.05	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	4.08		3.81	J	6.84
Metals	Barium	7440-39-3	6010C	mg/kg	86.2		84.6		1.87
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.566	J	0.605	J	6.66
Metals	Boron	7440-42-8	6010C	mg/kg	2.05	J	2.15	J	4.76
Metals	Cadmium	7440-43-9	6010C	mg/kg	1	U	1.01	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2640		2600		1.53
Metals	Chromium	7440-47-3	6010C	mg/kg	19.8		18.3		7.87
Metals	Cobalt	7440-48-4	6010C	mg/kg	4.79		5		4.29
Metals	Copper	7440-50-8	6010C	mg/kg	6.34		5.76		9.59
Metals	Iron	7439-89-6	6010C	mg/kg	20000		20000		0.00
Metals	Lead	7439-92-1	6010C	mg/kg	8.02		7.91		1.38
Metals	Lithium	7439-93-2	6010C	mg/kg	22.3		22.1		0.90
Metals	Magnesium	7439-95-4	6010C	mg/kg	4470		4320		3.41
Metals	Manganese	7439-96-5	6010C	mg/kg	379		318		17.50
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2	U	2.03	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	11.8		10.7		9.78
Metals	Phosphorus	7723-14-0	6010C	mg/kg	409	J	366	J	11.10
Metals	Potassium	7440-09-7	6010C	mg/kg	3240	J	2790	J	14.93
Metals	Selenium	7782-49-2	6020A	mg/kg	0.161	J	0.145	J	10.46
Metals	Silver	7440-22-4	6020A	mg/kg	0.093	J	0.158	J	51.79
Metals	Sodium	7440-23-5	6010C	mg/kg	78.9	J	91	J	14.24
Metals	Strontium	7440-24-6	6020A	mg/kg	22.9	J	24.2	J	5.52
Metals	Thallium	7440-28-0	6020A	mg/kg	0.286		0.274		4.29
Metals	Tin	7440-31-5	6010C	mg/kg	10	U	10.1	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1060		1030		2.87
Metals	Vanadium	7440-62-2	6010C	mg/kg	33.5		34.2		2.07
Metals	Zinc	7440-66-6	6010C	mg/kg	55.9		51.4		8.39
Metals	Zirconium	7440-67-7	6010C	mg/kg	2.58	J	2.74	J	6.02
Moisture Content	Moisture	MOIST	160.3M	%	2		2.3		13.95
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	UJ	0.6	J	200.00
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	1.7	UJ	1	J	200.00
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg	1.7	UJ	1.3	J	200.00
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg	11		17		42.86
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	17	U	17	U	--
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	1.7	UJ	1.2	J	200.00
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	0.74	J	1.9	J	87.88
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	1.7	UJ	3.1	J	200.00
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	1.7	UJ	0.8	J	200.00
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg					--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	1.7	UJ	2.8	J	200.00
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	0.76	J	4.7	J	144.32

				Location	5A_DG-709		5A_DG-709		RPD
				Sample Name:	SL-1009-SA5A-SB-4.0-5.0		SL-709-SA5A-SB-4.0-5.0		
				Sample Date	11/18/2013		11/18/2013		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	34	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.68		6.63		0.75
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg					--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg					--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg					--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg					--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg					--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg					--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg					--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg					--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg					--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg					--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg					--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg					--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg					--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg					--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg					--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg					--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg					--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg					--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg					--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg					--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg					--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg					--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg					--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg					--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg					--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg					--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg					--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg					--
SVOC	Aniline	62-53-3	8270D	µg/kg					--
SVOC	Benzidine	92-87-5	8270D	µg/kg					--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg					--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg					--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg					--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg					--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg					--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg					--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg					--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg					--
SVOC	Carbazole	86-74-8	8270D	µg/kg					--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg					--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg					--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg					--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg					--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg					--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg					--
SVOC	Isophorone	78-59-1	8270D	µg/kg					--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg					--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg					--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg					--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg					--
SVOC	Phenol	108-95-2	8270D	µg/kg					--
SVOC	Pyridine	110-86-1	8270D	µg/kg					--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg	0.12	J	0.17	UJ	200.00
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg	0.17	U	0.17	U	--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg	0.17	U	0.17	U	--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.1	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	5.1	UJ	2.5	J	200.00
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	13		16	J	20.69
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	33		38	J	14.08
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	5.1	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg	1	U	1.1	U	--

				Location	5A_DG-709		5A_DG-709		RPD
				Sample Name:	SL-1009-SA5A-SB-4.0-5.0		SL-709-SA5A-SB-4.0-5.0		
				Sample Date	11/18/2013		11/18/2013		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

				Location	5A_DG-715		5A_DG-715		RPD
				Sample Name:	SL-1015-SA5A-SB-0.0-0.5		SL-715-SA5A-SB-0.0-0.5		
				Sample Date	11/25/2013		11/25/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
1,4-Dioxane	1,4-Dioxane	123-91-1	8260B SIM	µg/kg					--
Alcohols	2-Propanol	67-63-0	8015C	µg/kg					--
Alcohols	Ethanol	64-17-5	8015C	µg/kg					--
Alcohols	Methanol	67-56-1	8015C	µg/kg					--
Dioxins	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	35822-46-9	1613B	ng/kg	547	J	273	J	66.83
Dioxins	1,2,3,4,6,7,8-HPCDF	67562-39-4	1613B	ng/kg	99.9	J	35.5	J	95.13
Dioxins	1,2,3,4,7,8,9-HPCDF	55673-89-7	1613B	ng/kg	13.1	J	4.62	J	95.71
Dioxins	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	39227-28-6	1613B	ng/kg	1.75	J	1.46	J	18.07
Dioxins	1,2,3,4,7,8-HXCDF	70648-26-9	1613B	ng/kg	2.88	J	1.55	J	60.05
Dioxins	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	57653-85-7	1613B	ng/kg	17	J	8.18	J	70.06
Dioxins	1,2,3,6,7,8-HXCDF	57117-44-9	1613B	ng/kg	2.82	J	1.42	J	66.04
Dioxins	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	19408-74-3	1613B	ng/kg	4.12	J	3.15	J	26.69
Dioxins	1,2,3,7,8,9-HXCDF	72918-21-9	1613B	ng/kg	0.951	J	0.585	J	47.66
Dioxins	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	1613B	ng/kg	5.11	U	5.07	U	--
Dioxins	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	40321-76-4	1613B	ng/kg	1.02	J	0.914	J	10.96
Dioxins	2,3,4,6,7,8-HXCDF	60851-34-5	1613B	ng/kg	4	J	1.98	J	67.56
Dioxins	2,3,4,7,8-PECDF	57117-31-4	1613B	ng/kg	5.11	U	5.07	U	--
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.262	J	0.301	J	13.85
Dioxins	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1613B	ng/kg	0.231	J	0.314	J	30.46
Dioxins	OCDD	3268-87-9	1613B	ng/kg	29900	J	10200	J	98.25
Dioxins	OCDF	39001-02-0	1613B	ng/kg	245	J	91.9	J	90.89
Dioxins	TCDD TEQ	TCDD TEQ	1613B	ng/kg	20.3		9.41		73.31
Formaldehyde	Formaldehyde	50-00-0	8315A	µg/kg	2100	U	20000	U	--
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	µg/kg					--
Herbicides	2,4,5-T	93-76-5	8151A	µg/kg					--
Herbicides	2,4-D	94-75-7	8151A	µg/kg					--
Herbicides	2,4-DB	94-82-6	8151A	µg/kg					--
Herbicides	Dicamba	1918-00-9	8151A	µg/kg					--
Herbicides	Dichlorprop	120-36-5	8151A	µg/kg					--
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	µg/kg					--
Herbicides	MCPA	94-74-6	8151A	µg/kg					--
Herbicides	MCPP	93-65-2	8151A	µg/kg					--
Herbicides	Silvex (2,4,5-TP)	93-72-1	8151A	µg/kg					--
Hexavalent Chromium	Chromium (Hexavalent Compounds)	18540-29-9	7199	mg/kg	3.1	J	1.1	J	95.24
Mercury	Mercury	7439-97-6	7471B	mg/kg	0.0276		0.0398		36.20
Metals	Aluminum	7429-90-5	6010C	mg/kg	17000		15800		7.32
Metals	Antimony	7440-36-0	6010C	mg/kg	4.02	UJ	4.08	UJ	--
Metals	Arsenic	7440-38-2	6010C	mg/kg	3.56	J	3.16	J	11.90
Metals	Barium	7440-39-3	6010C	mg/kg	80.6		88.9		9.79
Metals	Beryllium	7440-41-7	6010C	mg/kg	0.661	J	0.619	J	6.56
Metals	Boron	7440-42-8	6010C	mg/kg	10.1	UJ	2.03	J	200.00
Metals	Cadmium	7440-43-9	6010C	mg/kg	1.01	U	1.02	U	--
Metals	Calcium	7440-70-2	6010C	mg/kg	2390		2630		9.56
Metals	Chromium	7440-47-3	6010C	mg/kg	36.5		33.2		9.47
Metals	Cobalt	7440-48-4	6010C	mg/kg	4.03		4.21		4.37
Metals	Copper	7440-50-8	6010C	mg/kg	18.1		18.3		1.10
Metals	Iron	7439-89-6	6010C	mg/kg	19800		19600		1.02
Metals	Lead	7439-92-1	6010C	mg/kg	7.18		7.49		4.23
Metals	Lithium	7439-93-2	6010C	mg/kg	23.7		23.4		1.27
Metals	Magnesium	7439-95-4	6010C	mg/kg	4040		4030		0.25
Metals	Manganese	7439-96-5	6010C	mg/kg	244		292		17.91
Metals	Molybdenum	7439-98-7	6010C	mg/kg	2.01	U	2.04	U	--
Metals	Nickel	7440-02-0	6010C	mg/kg	9.37		10.3		9.46
Metals	Phosphorus	7723-14-0	6010C	mg/kg	278		300		7.61
Metals	Potassium	7440-09-7	6010C	mg/kg	2630	J	3200	J	19.55
Metals	Selenium	7782-49-2	6020A	mg/kg	0.208	J	0.184	J	12.24
Metals	Silver	7440-22-4	6020A	mg/kg	3.03	J	13.6	J	127.12
Metals	Sodium	7440-23-5	6010C	mg/kg	96.4	J	96.9	J	0.52
Metals	Strontium	7440-24-6	6020A	mg/kg	17.2		19.8		14.05
Metals	Thallium	7440-28-0	6020A	mg/kg	0.241		0.229		5.11
Metals	Tin	7440-31-5	6010C	mg/kg	10.1	U	10.2	U	--
Metals	Titanium	7440-32-6	6010C	mg/kg	1070		1090		1.85
Metals	Vanadium	7440-62-2	6010C	mg/kg	32		32.8		2.47
Metals	Zinc	7440-66-6	6010C	mg/kg	132	J	116	J	12.90
Metals	Zirconium	7440-67-7	6010C	mg/kg	2.73	J	2.64	J	3.35
Moisture Content	Moisture	MOIST	160.3M	%	2.5		2		22.22
PAHs	1-Methylnaphthalene	90-12-0	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	2-Methylnaphthalene	91-57-6	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthene	83-32-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Acenaphthylene	208-96-8	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Anthracene	120-12-7	8270D SIM	µg/kg	2.8	J	0.43	J	146.75
PAHs	Benzo(a)anthracene	56-55-3	8270D SIM	µg/kg	13	J	1.2	J	166.20
PAHs	Benzo(a)pyrene	50-32-8	8270D	µg/kg	13	J			--
PAHs	Benzo(a)pyrene	50-32-8	8270D SIM	µg/kg			1.3	J	--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg	16	J			--
PAHs	Benzo(b)fluoranthene	205-99-2	8270D SIM	µg/kg			2.3	J	--
PAHs	Benzo(e)pyrene	192-97-2	8270D SIM	µg/kg	8.4	J	17	UJ	200.00
PAHs	Benzo(g,h,i)perylene	191-24-2	8270D SIM	µg/kg	5.9	J	0.88	J	148.08
PAHs	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg	9	J			--
PAHs	Benzo(k)fluoranthene	207-08-9	8270D SIM	µg/kg			1.3	J	--
PAHs	Bis(2-ethylhexyl)phthalate	117-81-7	8270D SIM	µg/kg	18	J	18	UJ	200.00
PAHs	Butylbenzylphthalate	85-68-7	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Chrysene	218-01-9	8270D SIM	µg/kg	15	J	2.2	J	148.84
PAHs	Dibenzo(a,h)anthracene	53-70-3	8270D SIM	µg/kg	1.8	J	1.7	UJ	200.00
PAHs	Diethylphthalate	84-66-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Dimethylphthalate	131-11-3	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-butylphthalate	84-74-2	8270D SIM	µg/kg	18	U	18	U	--
PAHs	Di-n-octylphthalate	117-84-0	8270D SIM	µg/kg	18	UJ	18	UJ	--
PAHs	Fluoranthene	206-44-0	8270D SIM	µg/kg	28	J	2.9	J	162.46
PAHs	Fluorene	86-73-7	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	8270D SIM	µg/kg	5.7	J	1.7	UJ	200.00
PAHs	Morpholine	110-91-8	8270D SIM	µg/kg	21	U	20	U	--
PAHs	Naphthalene	91-20-3	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	N-Nitrosodimethylamine	62-75-9	8270D SIM	µg/kg	1.7	U	1.7	U	--
PAHs	Phenanthrene	85-01-8	8270D SIM	µg/kg	12	J	1.4	J	158.21
PAHs	Pyrene	129-00-0	8270D SIM	µg/kg	21	J	2.4	J	158.97

				Location	5A_DG-715		5A_DG-715		RPD
				Sample Name:	SL-1015-SA5A-SB-0.0-0.5		SL-715-SA5A-SB-0.0-0.5		
				Sample Date	11/25/2013		11/25/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
PCBPCTs	Aroclor 1016	12674-11-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1221	11104-28-2	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1232	11141-16-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1242	53469-21-9	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1248	12672-29-6	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1254	11097-69-1	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1260	11096-82-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1262	37324-23-5	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 1268	11100-14-4	8082A	µg/kg	17	U	17	U	--
PCBPCTs	Aroclor 5432	63496-31-1	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5442	12642-23-8	8082A	µg/kg	34	U	34	U	--
PCBPCTs	Aroclor 5460	11126-42-4	8082A	µg/kg	34	U	34	U	--
Perchlorate	Perchlorate	14797-73-0	6850	µg/kg					--
Pesticides	4,4'-DDD	72-54-8	8081B	µg/kg					--
Pesticides	4,4'-DDE	72-55-9	8081B	µg/kg					--
Pesticides	4,4'-DDT	50-29-3	8081B	µg/kg					--
Pesticides	Aldrin	309-00-2	8081B	µg/kg					--
Pesticides	Alpha-Bhc	319-84-6	8081B	µg/kg					--
Pesticides	Beta-Bhc	319-85-7	8081B	µg/kg					--
Pesticides	Chlordane	57-74-9	8081B	µg/kg					--
Pesticides	Delta-Bhc	319-86-8	8081B	µg/kg					--
Pesticides	Dieldrin	60-57-1	8081B	µg/kg					--
Pesticides	Endosulfan I	959-98-8	8081B	µg/kg					--
Pesticides	Endosulfan II	33213-65-9	8081B	µg/kg					--
Pesticides	Endosulfan Sulfate	1031-07-8	8081B	µg/kg					--
Pesticides	Endrin	72-20-8	8081B	µg/kg					--
Pesticides	Endrin Aldehyde	7421-93-4	8081B	µg/kg					--
Pesticides	Endrin Ketone	53494-70-5	8081B	µg/kg					--
Pesticides	Gamma-Bhc (Lindane)	58-89-9	8081B	µg/kg					--
Pesticides	Heptachlor	76-44-8	8081B	µg/kg					--
Pesticides	Heptachlor Epoxide	1024-57-3	8081B	µg/kg					--
Pesticides	Methoxychlor	72-43-5	8081B	µg/kg					--
Pesticides	Mirex	2385-85-5	8081B	µg/kg					--
Pesticides	Technical Toxaphene	8001-35-2	8081B	µg/kg					--
pH	pH	pH	9045M	pH	6.93		7.04		1.57
SVOC	1,1'-Biphenyl	92-52-4	8270D	µg/kg	34	U	34	U	--
SVOC	1,2,4-Trichlorobenzene	120-82-1	8270D	µg/kg	34	U	34	U	--
SVOC	1,2-Dichlorobenzene	95-50-1	8270D	µg/kg	34	U	34	U	--
SVOC	1,2-Diphenylhydrazine	122-66-7	8270D	µg/kg	34	U	34	U	--
SVOC	1,3-Dichlorobenzene	541-73-1	8270D	µg/kg	34	U	34	U	--
SVOC	1,4-Dichlorobenzene	106-46-7	8270D	µg/kg	34	U	34	U	--
SVOC	2,4,5-Trichlorophenol	95-95-4	8270D	µg/kg	34	U	34	U	--
SVOC	2,4,6-Trichlorophenol	88-06-2	8270D	µg/kg	34	U	34	U	--
SVOC	2,4-Dichlorophenol	120-83-2	8270D	µg/kg	34	U	34	U	--
SVOC	2,4-Dimethylphenol	105-67-9	8270D	µg/kg	34	U	34	U	--
SVOC	2,4-Dinitrophenol	51-28-5	8270D	µg/kg	670	U	670	U	--
SVOC	2,6-Dichlorophenol	87-65-0	8270D	µg/kg	34	U	34	U	--
SVOC	2-Chloronaphthalene	91-58-7	8270D	µg/kg	34	U	33	U	--
SVOC	2-Chlorophenol	95-57-8	8270D	µg/kg	34	U	34	U	--
SVOC	2-Methylphenol	95-48-7	8270D	µg/kg	34	U	34	U	--
SVOC	2-Nitroaniline	88-74-4	8270D	µg/kg	34	U	34	U	--
SVOC	2-Nitrophenol	88-75-5	8270D	µg/kg	34	U	34	U	--
SVOC	3,3'-Dichlorobenzidine	91-94-1	8270D	µg/kg	340	U	340	U	--
SVOC	3,5-Dimethylphenol	108-68-9	8270D	µg/kg	170	U	170	U	--
SVOC	3-Nitroaniline	99-09-2	8270D	µg/kg	170	U	170	U	--
SVOC	4,6-Dinitro-2-methylphenol	534-52-1	8270D	µg/kg	510	U	510	U	--
SVOC	4-Bromophenyl-phenylether	101-55-3	8270D	µg/kg	34	U	34	U	--
SVOC	4-Chloro-3-methylphenol	59-50-7	8270D	µg/kg	34	U	34	U	--
SVOC	4-Chloroaniline	106-47-8	8270D	µg/kg	34	U	34	U	--
SVOC	4-Chlorophenyl-phenylether	7005-72-3	8270D	µg/kg	34	U	34	U	--
SVOC	4-Methylphenol	106-44-5	8270D	µg/kg	34	U	34	U	--
SVOC	4-Nitroaniline	100-01-6	8270D	µg/kg	170	U	170	U	--
SVOC	4-Nitrophenol	100-02-7	8270D	µg/kg	510	U	510	U	--
SVOC	Aniline	62-53-3	8270D	µg/kg	340	U	340	U	--
SVOC	Benzidine	92-87-5	8270D	µg/kg	1700	U			--
SVOC	Benzo(a)pyrene	50-32-8	8270D	µg/kg	13	J			--
SVOC	Benzo(b)fluoranthene	205-99-2	8270D	µg/kg	16	J			--
SVOC	Benzo(k)fluoranthene	207-08-9	8270D	µg/kg	9	J			--
SVOC	Benzoic Acid	65-85-0	8270D	µg/kg	510	U	510	U	--
SVOC	Benzyl Alcohol	100-51-6	8270D	µg/kg	340	U	340	U	--
SVOC	bis(2-chloroethoxy)methane	111-91-1	8270D	µg/kg	34	U	34	U	--
SVOC	bis(2-chloroethyl) ether	111-44-4	8270D	µg/kg	34	U	34	U	--
SVOC	bis(2-chloroisopropyl) ether	39638-32-9	8270D	µg/kg	34	U	34	U	--
SVOC	Carbazole	86-74-8	8270D	µg/kg	34	U	34	U	--
SVOC	Dibenzofuran	132-64-9	8270D	µg/kg	34	U	34	U	--
SVOC	Diphenylamine	NDPA122-39-4	8270D	µg/kg	170	U	170	U	--
SVOC	Hexachlorobenzene	118-74-1	8270D	µg/kg	17	U	17	U	--
SVOC	Hexachlorobutadiene	87-68-3	8270D	µg/kg	34	U	34	U	--
SVOC	Hexachlorocyclopentadiene	77-47-4	8270D	µg/kg	510	U	510	U	--
SVOC	Hexachloroethane	67-72-1	8270D	µg/kg	170	U	170	U	--
SVOC	Isophorone	78-59-1	8270D	µg/kg	34	U	34	U	--
SVOC	Nitrobenzene	98-95-3	8270D	µg/kg	34	U	34	U	--
SVOC	N-Nitroso-di-n-propylamine	621-64-7	8270D	µg/kg	34	U	34	U	--
SVOC	N-Nitrosodiphenylamine	86-30-6	8270D	µg/kg	34	U	34	U	--
SVOC	Pentachlorophenol	87-86-5	8270D	µg/kg	170	U	170	U	--
SVOC	Phenol	108-95-2	8270D	µg/kg	34	U	34	U	--
SVOC	Pyridine	110-86-1	8270D	µg/kg	170	U	170	U	--
Terphenyls	m-Terphenyl	92-06-8	8015B	mg/kg					--
Terphenyls	o-Terphenyl	84-15-1	8015B	mg/kg					--
Terphenyls	p-Terphenyl	92-94-4	8015B	mg/kg					--
TPH-EFH	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	26	U	5.1	U	--
TPH-EFH	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	26	U	5.1	U	--
TPH-EFH	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	32	J	12	J	90.91
TPH-EFH	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	180	J	32	J	139.62
TPH-EFH	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	26	U	5.1	U	--
TPH-GRO	Gasoline Range Organics (C5-C12)	GROC5C12	8015M	mg/kg					--

				Location	5A_DG-715		5A_DG-715		RPD
				Sample Name:	SL-1015-SA5A-SB-0.0-0.5		SL-715-SA5A-SB-0.0-0.5		
				Sample Date	11/25/2013		11/25/2013		
				Start Depth:	0		0		
				End Depth:	0.5		0.5		
				Area:	5A_DG		5A_DG		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
VOC	1,1,1,2-Tetrachloroethane	630-20-6	8260B	µg/kg					--
VOC	1,1,1-Trichloroethane	71-55-6	8260B	µg/kg					--
VOC	1,1,2,2-Tetrachloroethane	79-34-5	8260B	µg/kg					--
VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	8260B	µg/kg					--
VOC	1,1,2-Trichloroethane	79-00-5	8260B	µg/kg					--
VOC	1,1-Dichloroethane	75-34-3	8260B	µg/kg					--
VOC	1,1-Dichloroethene	75-35-4	8260B	µg/kg					--
VOC	1,1-Dichloropropene	563-58-6	8260B	µg/kg					--
VOC	1,2,3-Trichlorobenzene	87-61-6	8260B	µg/kg					--
VOC	1,2,3-Trichloropropane	96-18-4	8260B	µg/kg					--
VOC	1,2,4-Trichlorobenzene	120-82-1	8260B	µg/kg					--
VOC	1,2,4-Trimethylbenzene	95-63-6	8260B	µg/kg					--
VOC	1,2-Dibromo-3-chloropropane	96-12-8	8260B	µg/kg					--
VOC	1,2-Dibromoethane	106-93-4	8260B	µg/kg					--
VOC	1,2-Dichlorobenzene	95-50-1	8260B	µg/kg					--
VOC	1,2-Dichloroethane	107-06-2	8260B	µg/kg					--
VOC	1,2-Dichloropropane	78-87-5	8260B	µg/kg					--
VOC	1,3,5-Trimethylbenzene	108-67-8	8260B	µg/kg					--
VOC	1,3-Dichlorobenzene	541-73-1	8260B	µg/kg					--
VOC	1,3-Dichloropropane	142-28-9	8260B	µg/kg					--
VOC	1,4-Dichlorobenzene	106-46-7	8260B	µg/kg					--
VOC	1-Chlorohexane	544-10-5	8260B	µg/kg					--
VOC	2,2-Dichloropropane	594-20-7	8260B	µg/kg					--
VOC	2-Butanone (MEK)	78-93-3	8260B	µg/kg					--
VOC	2-Chloro-1,1,1-trifluoroethane	75-88-7	8260B	µg/kg					--
VOC	2-Chloroethyl Vinyl Ether	110-75-8	8260B	µg/kg					--
VOC	2-Chlorotoluene	95-49-8	8260B	µg/kg					--
VOC	2-Hexanone	591-78-6	8260B	µg/kg					--
VOC	2-Phenylbutane	135-98-8	8260B	µg/kg					--
VOC	4-Chlorotoluene	106-43-4	8260B	µg/kg					--
VOC	4-Methyl-2-pentanone (MIBK)	108-10-1	8260B	µg/kg					--
VOC	Acetone	67-64-1	8260B	µg/kg					--
VOC	Acrolein	107-02-8	8260B	µg/kg					--
VOC	Acrylonitrile	107-13-1	8260B	µg/kg					--
VOC	Benzene	71-43-2	8260B	µg/kg					--
VOC	Bromobenzene	108-86-1	8260B	µg/kg					--
VOC	Bromochloromethane	74-97-5	8260B	µg/kg					--
VOC	Bromodichloromethane	75-27-4	8260B	µg/kg					--
VOC	Bromoform	75-25-2	8260B	µg/kg					--
VOC	Bromomethane	74-83-9	8260B	µg/kg					--
VOC	Carbon Disulfide	75-15-0	8260B	µg/kg					--
VOC	Carbon Tetrachloride	56-23-5	8260B	µg/kg					--
VOC	Chlorobenzene	108-90-7	8260B	µg/kg					--
VOC	Chloroethane	75-00-3	8260B	µg/kg					--
VOC	Chloroform	67-66-3	8260B	µg/kg					--
VOC	Chloromethane	74-87-3	8260B	µg/kg					--
VOC	Chlorotrifluoroethylene	79-38-9	8260B	µg/kg					--
VOC	cis-1,2-Dichloroethene	156-59-2	8260B	µg/kg					--
VOC	cis-1,3-Dichloropropene	10061-01-5	8260B	µg/kg					--
VOC	Cymene	99-87-6	8260B	µg/kg					--
VOC	Di isopropyl Ether	108-20-3	8260B	µg/kg					--
VOC	Dibromochloromethane	124-48-1	8260B	µg/kg					--
VOC	Dibromomethane	74-95-3	8260B	µg/kg					--
VOC	Dichlorodifluoromethane	75-71-8	8260B	µg/kg					--
VOC	Ethylbenzene	100-41-4	8260B	µg/kg					--
VOC	Hexachloro-1,3-butadiene	87-68-3	8260B	µg/kg					--
VOC	Isopropylbenzene	98-82-8	8260B	µg/kg					--
VOC	m,p-Xylene	179601-23-1	8260B	µg/kg					--
VOC	Methyl Iodide	74-88-4	8260B	µg/kg					--
VOC	Methyl Tert-Butyl Ether	1634-04-4	8260B	µg/kg					--
VOC	Methylene Chloride	75-09-2	8260B	µg/kg					--
VOC	n-Butylbenzene	104-51-8	8260B	µg/kg					--
VOC	n-Propylbenzene	103-65-1	8260B	µg/kg					--
VOC	o-Xylene	95-47-6	8260B	µg/kg					--
VOC	Styrene	100-42-5	8260B	µg/kg					--
VOC	tert-Butyl ethyl ether	637-92-3	8260B	µg/kg					--
VOC	tert-Butylbenzene	98-06-6	8260B	µg/kg					--
VOC	Tertiary amyl methyl ether	994-05-8	8260B	µg/kg					--
VOC	Tertiary butyl alcohol	75-65-0	8260B	µg/kg					--
VOC	Tetrachloroethene	127-18-4	8260B	µg/kg					--
VOC	Toluene	108-88-3	8260B	µg/kg					--
VOC	trans-1,2-Dichloroethene	156-60-5	8260B	µg/kg					--
VOC	trans-1,3-Dichloropropene	10061-02-6	8260B	µg/kg					--
VOC	Trichloroethene	79-01-6	8260B	µg/kg					--
VOC	Trichlorofluoromethane	75-69-4	8260B	µg/kg					--
VOC	Vinyl Acetate	108-05-4	8260B	µg/kg					--
VOC	Vinyl Chloride	75-01-4	8260B	µg/kg					--

ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil

-- - RPD not caluculated when both field duplicate and normal samples are nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as
estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C6 – Subarea 5A Completeness

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins – 1613B	469	1,202	--	1,418	79	3,168	100
Metals - 6010C	2,696	1,202	--	457	169	4,524	100
Metals – 6020A	217	416	--	57	6	696	100
Perchlorate - 6850	--	--	--	2	--	2	100
Hexavalent Chromium – 7199	1	9	1	1	--	12	91.7
Mercury – 7471B	25	65	--	84	--	174	100
Terphenyls – 8015B	--	2	--	12	1	15	100
Alcohols – 8015C	--	1	--	5	--	6	100
TPH-EFH/GRO – 8015M	172	91	--	679	6	948	100
Pesticides – 8081B	--	6	--	175	8	189	100
PCB/PCTs – 8082A	1	8	--	1,009	2	1,020	100
Herbicides – 8151A	--	--	--	10	--	10	100
VOCs – 8260B	4	1	--	301	2	308	100
VOC SIM – 8260B SIM	--	--	--	2	2	4	100
SVOC – 8270D	--	8	1	97	6	111	99.1
SVOC SIM – 8270D SIM	341	550	--	3,553	87	4.531	100
Formaldehyde – 8315A	2	--	--	7	1	10	100
Completeness Total for Phase 3 Subarea 5A Samples Collected and Judged Valid							**98.995**

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

CDM
555 17th Street, Suite 1100
Denver, CO 80202
ATTN: Mrs. Cherie Zakowski

August 8, 2013

SUBJECT: Santa Susana Field Laboratory, Data Validation

Dear Mrs. Zakowski,

Enclosed is the final validation report for the fractions listed below. These SDGs were received on July 11, 2013.

LDC project# 30037:

SDG #	Fraction
PH041, PH042, PH043, PH044, PH047, PH050, PH051, PH052, PH053, PH057	Semivolatiles (EPA SW 846 Method 8270D-SIM) Chlorinated Pesticides (EPA SW 846 Method 8081B) PCBs (EPA SW 846 Method 8082A) Metals (EPA SW 846 Method 6010C/6020A/7471A/7470A) TPH-G (EPA SW 846 Method 8015M) TPH-E (EPA SW 846 Method 8015M) Dioxins/Dibenzofurans (EPA Method 1613B)

The following deliverables are submitted under this report:

- Attachment I Sample ID Cross Reference and Data Review Level
- Attachment II Overall Data Qualification Summary
- Enclosure I Level III ADR Outliers (including manual review outliers)
- Enclosure II Level IV Validation Reports

The data validation was performed in accordance to the Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005), and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience. The following items were evaluated during the review:

- Holding Times
- Sample Preservation
- Cooler Temperatures
- Initial Calibration (Level IV only)
- Continuing Calibration (Level IV only)

- Blanks
- Surrogates
- Matrix Spike/Matrix Spike Duplicates
- Laboratory Duplicates
- Laboratory Control Samples
- Internal Standards (Level IV only)
- ICP Serial Dilution (Manual Review)
- Detection and Quantitation Limits
- Field QC Samples

Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar
Project Manager/Chemist

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-May-2013	TB-052813	7073185	TB	5030B	8015M	III
28-May-2013	SL-830-SA5A-SB-0.0-0.5	7073186	N	3546	8015M	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	3050B	6010C	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	3050B	6020A	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	3546	8015M	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	3546	8270D SIM	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	5035A	8015M	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	METHOD	1613B	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75	7073187	N	METHOD	7471B	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75D	P073187D221246	DUP	METHOD	7471B	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75M	P073187R221248	MS	METHOD	7471B	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75M	P073187R260249	MS	3546	8270D SIM	III
28-May-2013	SL-830-SA5A-SB-2.75-3.75M	P073187R321635A	MS	3546	8015M	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	3050B	6010C	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	3050B	6020A	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	3546	8015M	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	3546	8270D SIM	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	METHOD	1613B	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5	7073188	N	METHOD	7471B	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5MSD	P073188M260213	MSD	3546	8270D SIM	III
28-May-2013	SL-828-SA5A-SB-0.0-0.5MS	P073188R260140	MS	3546	8270D SIM	III
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	3050B	6010C	III
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	3050B	6020A	III
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	3546	8015M	III
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	3546	8270D SIM	III
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-May-2013	SL-829-SA5A-SB-0.0-0.5	7073189	N	METHOD	7471B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-828-SA5A-SB-0.0-0.5** ***Collected:*** **5/28/2013 1:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.594	J	0.488	MDL	3.90	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.587	J	0.0654	MDL	0.976	PQL	mg/Kg	J	Z
BORON	3.10	J	0.810	MDL	9.76	PQL	mg/Kg	J	Z
CADMIUM	0.314	J	0.0322	MDL	0.976	PQL	mg/Kg	J	Z
CALCIUM	2020		3.92	MDL	19.5	PQL	mg/Kg	J	Q
MOLYBDENUM	0.650	J	0.166	MDL	1.95	PQL	mg/Kg	U	B, B, F, F
NICKEL	12.6		0.107	MDL	1.95	PQL	mg/Kg	J	A
PHOSPHORUS	389		0.498	MDL	9.76	PQL	mg/Kg	J	Q
SODIUM	61.6	J	16.3	MDL	97.6	PQL	mg/Kg	J	Z
TIN	2.52	J	0.215	MDL	9.76	PQL	mg/Kg	U	B
Zirconium	3.22	J	0.810	MDL	4.88	PQL	mg/Kg	J	Z

Sample ID: **SL-829-SA5A-SB-0.0-0.5** ***Collected:*** **5/28/2013 2:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.570	J	0.499	MDL	3.99	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.685	J	0.0668	MDL	0.997	PQL	mg/Kg	J	Z
BORON	3.01	J	0.828	MDL	9.97	PQL	mg/Kg	J	Z
CADMIUM	0.238	J	0.0329	MDL	0.997	PQL	mg/Kg	J	Z
CALCIUM	2010		4.01	MDL	19.9	PQL	mg/Kg	J	Q
MOLYBDENUM	0.800	J	0.170	MDL	1.99	PQL	mg/Kg	U	B, B, F, F
NICKEL	13.9		0.110	MDL	1.99	PQL	mg/Kg	J	A
PHOSPHORUS	305		0.509	MDL	9.97	PQL	mg/Kg	J	Q
SODIUM	81.0	J	16.7	MDL	99.7	PQL	mg/Kg	J	Z
TIN	2.82	J	0.219	MDL	9.97	PQL	mg/Kg	U	B
Zirconium	4.03	J	0.828	MDL	4.99	PQL	mg/Kg	J	Z

Sample ID: **SL-830-SA5A-SB-2.75-3.75** ***Collected:*** **5/28/2013 11:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.723	J	0.514	MDL	4.11	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.758	J	0.0689	MDL	1.03	PQL	mg/Kg	J	Z
BORON	1.65	J	0.853	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.216	J	0.0339	MDL	1.03	PQL	mg/Kg	J	Z
CALCIUM	2330		4.13	MDL	20.6	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.641	J	0.175	MDL	2.06	PQL	mg/Kg	U	B, B, F, F
NICKEL	12.3		0.113	MDL	2.06	PQL	mg/Kg	J	A
PHOSPHORUS	214		0.524	MDL	10.3	PQL	mg/Kg	J	Q
SODIUM	87.4	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	3.11	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	4.10	J	0.853	MDL	5.14	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	20.6		0.0332	MDL	0.390	PQL	mg/Kg	J	Q

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* REA2/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0976	MDL	0.390	PQL	mg/Kg	J	Z

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0566	J	0.0195	MDL	0.195	PQL	mg/Kg	J	Z

Sample ID: SL-829-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 2:15:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	21.8		0.0339	MDL	0.399	PQL	mg/Kg	J	Q

Sample ID: SL-829-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0477	J	0.0199	MDL	0.199	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS
Method: 6020A **Matrix: SO**

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	21.2		0.0350	MDL	0.411	PQL	mg/Kg	J	Q

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* REA2/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.121	J	0.103	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0494	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471B **Matrix: SO**

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0096	MDL	0.0160	PQL	mg/Kg	J	Z

Sample ID: SL-829-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0118	J	0.0098	MDL	0.0163	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1613B **Matrix: SO**

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.19	JB	0.0829	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.665	JQ	0.0873	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.540	JBQ	0.0568	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.75	J	0.0925	MDL	5.00	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-828-SA5A-SB-0.0-0.5** ***Collected:*** **5/28/2013 1:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.471	JB	0.0501	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.75	J	0.0924	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.320	JQ	0.0707	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.498	JB	0.0683	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.568	JB	0.0410	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.696	JB	0.0570	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.493	J	0.0444	MDL	5.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0599	J	0.0452	MDL	1.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.211	JBQ	0.0840	MDL	1.00	PQL	ng/Kg	J	Z

Sample ID: **SL-829-SA5A-SB-0.0-0.5** ***Collected:*** **5/28/2013 2:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.04	JB	0.0577	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.00	J	0.0603	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.666	JB	0.0505	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.04	J	0.0615	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.674	JBQ	0.0451	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.23	J	0.0635	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.195	J	0.0600	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.383	JBQ	0.0492	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.152	JB	0.0244	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.840	JB	0.0517	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.200	J	0.0273	MDL	4.96	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0373	J	0.0328	MDL	0.992	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0590	JBQ	0.0531	MDL	0.992	PQL	ng/Kg	U	B

Sample ID: **SL-830-SA5A-SB-2.75-3.75** ***Collected:*** **5/28/2013 11:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.13	JB	0.0468	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.09	J	0.0630	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.811	JB	0.0501	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.21	J	0.0685	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.797	JB	0.0443	MDL	5.12	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	1.99	J	0.0653	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.204	J	0.0535	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.642	JB	0.0552	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.718	JB	0.0348	MDL	5.12	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.05	JB	0.0474	MDL	5.12	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.815	J	0.0335	MDL	5.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0831	JQ	0.0316	MDL	1.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.259	JBQ	0.0657	MDL	1.02	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-830-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.9	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-830-SA5A-SB-2.75-3.75 *Collected:* 5/28/2013 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	4.3	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	14		4.2	MDL	10	PQL	mg/Kg	J	Q

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: SL-828-SA5A-SB-0.0-0.5 *Collected:* 5/28/2013 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.89	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.72	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.88	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.77	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.72	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-828-SA5A-SB-0.0-0.5** *Collected:* **5/28/2013 1:40:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	6.7	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: **SL-829-SA5A-SB-0.0-0.5** *Collected:* **5/28/2013 2:15:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.80	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.69	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.8	J	6.1	MDL	18	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-830-SA5A-SB-2.75-3.75** *Collected:* **5/28/2013 11:35:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.69	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.2	J	6.2	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Diethylphthalate	19	U	6.2	MDL	19	PQL	ug/Kg	UJ	Q
FLUORANTHENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.93	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.94	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Reason Code Legend

Reason Code	*Description*
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

PH041

Method Blank Outlier Report

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1500B372229	5/31/2013 10:29:00 PM	1,2,3,4,6,7,8-HPCDD	0.0716 ng/Kg	SL-828-SA5A-SB-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0443 ng/Kg	SL-829-SA5A-SB-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0384 ng/Kg	SL-830-SA5A-SB-2.75-3.75
		1,2,3,4,7,8-HXCDF	0.0216 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0344 ng/Kg	
		1,2,3,7,8-PECDD	0.0518 ng/Kg	
		1,2,3,7,8-PECDF	0.0266 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0184 ng/Kg	
		2,3,7,8-TCDF	0.0382 ng/Kg	
		OCDD	0.237 ng/Kg	
		OCDF	0.0897 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-829-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.0590 ng/Kg	0.0590U ng/Kg

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB221750	6/4/2013 5:50:00 PM	CALCIUM	6.04 mg/Kg	SL-828-SA5A-SB-0.0-0.5
		CHROMIUM	0.279 mg/Kg	SL-829-SA5A-SB-0.0-0.5
		IRON	4.01 mg/Kg	SL-830-SA5A-SB-2.75-3.75
		MOLYBDENUM	0.215 mg/Kg	
		NICKEL	0.323 mg/Kg	
		PHOSPHORUS	1.44 mg/Kg	
		TIN	1.46 mg/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-828-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.650 mg/Kg	0.650U mg/Kg
SL-828-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-829-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.800 mg/Kg	0.800U mg/Kg
SL-829-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-830-SA5A-SB-2.75-3.75(RES/TOT)	MOLYBDENUM	0.641 mg/Kg	0.641U mg/Kg
SL-830-SA5A-SB-2.75-3.75(RES/TOT)	TIN	3.11 mg/Kg	3.11U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB222006A	6/9/2013 8:06:00 PM	STRONTIUM	0.0361 mg/Kg	SL-828-SA5A-SB-0.0-0.5 SL-829-SA5A-SB-0.0-0.5 SL-830-SA5A-SB-2.75-3.75

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-052913(REA/TOT)	5/29/2013 3:00:00 PM	CALCIUM	0.0718 mg/L	SL-828-SA5A-SB-0.0-0.5
		MANGANESE	0.0013 mg/L	SL-829-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0049 mg/L	SL-830-SA5A-SB-0.0-0.5
				SL-830-SA5A-SB-2.75-3.75

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-828-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.650 mg/Kg	0.650U mg/Kg
SL-829-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.800 mg/Kg	0.800U mg/Kg
SL-830-SA5A-SB-2.75-3.75(RES/TOT)	MOLYBDENUM	0.641 mg/Kg	0.641U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2/TOT)	4/11/2013 3:00:00 PM	COPPER	0.0036 mg/L	SL-828-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0036 mg/L	SL-829-SA5A-SB-0.0-0.5
				SL-830-SA5A-SB-0.0-0.5
				SL-830-SA5A-SB-2.75-3.75

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-828-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.650 mg/Kg	0.650U mg/Kg
SL-829-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.800 mg/Kg	0.800U mg/Kg
SL-830-SA5A-SB-2.75-3.75(RES/TOT)	MOLYBDENUM	0.641 mg/Kg	0.641U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-830-SA5A-SB-2.75-3.75MSD (SL-830-SA5A-SB-2.75-3.75)	EFH (C12-C14)	-	-	49.00-123.00	21 (20.00)	EFH (C12-C14)	J (all detects)
	EFH (C15-C20)	-	158	49.00-123.00	25 (20.00)	EFH (C15-C20)	
	EFH (C8-C11)	-	-	49.00-123.00	40 (20.00)	EFH (C8-C11)	
SL-830-SA5A-SB-2.75-3.75MS SL-830-SA5A-SB-2.75-3.75MSD (SL-830-SA5A-SB-2.75-3.75)	EFH (C30-C40)	11	22	49.00-123.00	-	EFH (C30-C40)	J(all detects) UJ(all non-detects)

Method: 8270D SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-830-SA5A-SB-2.75-3.75MS (SL-830-SA5A-SB-2.75-3.75)	Diethylphthalate	74	-	76.00-127.00	-	Diethylphthalate	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 7471B
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-830-SA5A-SB-2.75-3.75DUP (TOT) (SL-828-SA5A-SB-0.0-0.5 SL-829-SA5A-SB-0.0-0.5 SL-830-SA5A-SB-2.75-3.75)	MERCURY	200	20.00	No Qual, OK by Difference

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Reporting Limit Outliers

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-828-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.19	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.665	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.540	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	1.75	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.471	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.75	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.320	5.00	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.498	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.568	5.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.696	5.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.493	5.00	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0599	1.00	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.211	1.00	PQL	ng/Kg	
SL-829-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.04	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.00	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.666	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	2.04	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.674	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	2.23	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.195	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.383	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.152	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.840	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.200	4.96	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0373	0.992	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0590	0.992	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-830-SA5A-SB-2.75-3.75	1,2,3,4,7,8,9-HPCDF	JB	1.13	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.09	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.811	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	4.21	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.797	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.99	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.204	5.12	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.642	5.12	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.718	5.12	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.05	5.12	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.815	5.12	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0831	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.259	1.02	PQL	ng/Kg	

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-828-SA5A-SB-0.0-0.5	ANTIMONY	J	0.594	3.90	PQL	mg/Kg	
	BERYLLIUM	J	0.587	0.976	PQL	mg/Kg	
	BORON	J	3.10	9.76	PQL	mg/Kg	
	CADMIUM	J	0.314	0.976	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.650	1.95	PQL	mg/Kg	
	SODIUM	J	61.6	97.6	PQL	mg/Kg	
	TIN	J	2.52	9.76	PQL	mg/Kg	
	Zirconium	J	3.22	4.88	PQL	mg/Kg	
SL-829-SA5A-SB-0.0-0.5	ANTIMONY	J	0.570	3.99	PQL	mg/Kg	
	BERYLLIUM	J	0.685	0.997	PQL	mg/Kg	
	BORON	J	3.01	9.97	PQL	mg/Kg	
	CADMIUM	J	0.238	0.997	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.800	1.99	PQL	mg/Kg	
	SODIUM	J	81.0	99.7	PQL	mg/Kg	
	TIN	J	2.82	9.97	PQL	mg/Kg	
	Zirconium	J	4.03	4.99	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-830-SA5A-SB-2.75-3.75	ANTIMONY	J	0.723	4.11	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.758	1.03	PQL	mg/Kg	
	BORON	J	1.65	10.3	PQL	mg/Kg	
	CADMIUM	J	0.216	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.641	2.06	PQL	mg/Kg	
	SODIUM	J	87.4	103	PQL	mg/Kg	
	TIN	J	3.11	10.3	PQL	mg/Kg	
	Zirconium	J	4.10	5.14	PQL	mg/Kg	

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-828-SA5A-SB-0.0-0.5	SELENIUM	J	0.119	0.390	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0566	0.195	PQL	mg/Kg	
SL-829-SA5A-SB-0.0-0.5	SILVER	J	0.0477	0.199	PQL	mg/Kg	J (all detects)
SL-830-SA5A-SB-2.75-3.75	SELENIUM	J	0.121	0.411	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0494	0.206	PQL	mg/Kg	

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-828-SA5A-SB-0.0-0.5	MERCURY	J	0.0108	0.0160	PQL	mg/Kg	J (all detects)
SL-829-SA5A-SB-0.0-0.5	MERCURY	J	0.0118	0.0163	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-830-SA5A-SB-0.0-0.5	EFH (C15-C20)	J	2.9	5.1	PQL	mg/Kg	J (all detects)
SL-830-SA5A-SB-2.75-3.75	EFH (C21-C30)	J	4.3	5.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH041 **Laboratory: LL**

EDD Filename: PrepPH041_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **8270D SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-828-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.89	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.72	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.88	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.77	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.72	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.7	18	PQL	ug/Kg	
SL-829-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.80	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.69	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.8	18	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
SL-830-SA5A-SB-2.75-3.75	BENZO(B)FLUORANTHENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.2	19	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.93	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.94	1.7	PQL	ug/Kg	

LDC #: 30037A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/25/13
SDG #: PH041 ADR Page: 1 of 1
Laboratory: Eurofins Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010C/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	—	Sampling dates: 5/28/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW	MS/D ~~(SDG~~ from PH044 (6010/6020))
VII.	Duplicate Sample Analysis	A	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(From PH044) Ni (14%D) : J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB= EB-052913 (PH042) FB= FB-041113 (PH029)

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-830-SA5A-SB-2.75-3.75	11		21		31	
2	SL-828-SA5A-SB-0.0-0.5	12		22		32	
3	SL-829-SA5A-SB-0.0-0.5	13		23		33	
4	SL-830-SA5A-SB-2.75-3.75~~MS~~ DUP (Hg only)	14		24		34	
~~5~~	~~SL-830-SA5A-SB-2.75-3.75MSD~~	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 30037A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2	3						
Sb			3.1	1.55	0.72	0.59	0.57						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2							
Mo			2.2	1.1	0.64	0.65							

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	3								
Mo			2.1	1.05	0.80								

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 30037A4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CL
2nd Reviewer: LW

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg Reason: F
Sampling date: 4/11/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	1	2	3							
Cu	0.0036	1.8										
Mo	0.0036	1.8	0.64	0.65	0.80							

Sampling date: 5/28/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	EB-052913 (SDG: PH042)	Action Limit	1	2	3							
Ca	0.0718	35.9										
Mn	.0013	0.65										
Mo	0.0049	2.45	0.64	0.65	0.80							

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-May-2013	TB-052913	7075254	TB	5030B	8015M	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	3050B	6010C	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	3050B	6020A	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	3546	8015M	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	3546	8270D SIM	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	METHOD	1613B	III
29-May-2013	SL-831-SA5A-SB-0.0-0.5	7075248	N	METHOD	7471B	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	3050B	6010C	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	3050B	6020A	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	3546	8015M	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	3546	8270D SIM	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	5035A	8015M	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	METHOD	1613B	III
29-May-2013	SL-831-SA5A-SB-4.5-5.5	7075249	N	METHOD	7471B	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	3050B	6010C	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	3050B	6020A	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	3546	8015M	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	3546	8270D SIM	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	METHOD	1613B	III
29-May-2013	SL-832-SA5A-SB-0.0-0.5	7075250	N	METHOD	7471B	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	3050B	6010C	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	3050B	6020A	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	3546	8015M	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	3546	8270D SIM	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	5035A	8015M	III
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-May-2013	SL-832-SA5A-SB-4.0-5.0	7075251	N	METHOD	7471B	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	3050B	6010C	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	3050B	6020A	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	3546	8015M	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	3546	8270D SIM	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	5035A	8015M	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	METHOD	1613B	III
29-May-2013	SL-832-SA5A-SB-7.2-8.2	7075252	N	METHOD	7471B	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	3050B	6010C	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	3050B	6020A	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	3546	8015M	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	3546	8270D SIM	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	METHOD	1613B	III
29-May-2013	SL-842-SA5A-SB-0.0-0.5	7075253	N	METHOD	7471B	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	3050B	6010C	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	3050B	6020A	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	3546	8015M	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	3546	8270D SIM	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	METHOD	1613B	III
29-May-2013	SL-844-SA5A-SB-0.0-0.5	7075256	N	METHOD	7471B	III
29-May-2013	SL-843-SA5A-SB-0.0-0.5	7075255	N	METHOD	1613B	III
29-May-2013	EB-052913	7075257	EB	3005A	6010C	III
29-May-2013	EB-052913	7075257	EB	3510C	8015M	III
29-May-2013	EB-052913	7075257	EB	3510C	8270D SIM	III
29-May-2013	EB-052913	7075257	EB	5030B	8015M	III
29-May-2013	EB-052913	7075257	EB	M3010A	6020A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-May-2013	EB-052913	7075257	EB	METHOD	1613B	III
29-May-2013	EB-052913	7075257	EB	METHOD	7470A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: EB-052913 **Collected:** 5/29/2013 3:00:00 **Analysis Type:** REA/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	0.0718	J	0.0640	MDL	0.400	PQL	mg/L	U	B
MANGANESE	0.0013	J	0.00083	MDL	0.0100	PQL	mg/L	J	Z
MOLYBDENUM	0.0049	J	0.0029	MDL	0.0200	PQL	mg/L	U	B

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-831-SA5A-SB-0.0-0.5 **Collected:** 5/29/2013 8:35:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.539	J	0.499	MDL	3.99	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.639	J	0.0669	MDL	0.998	PQL	mg/Kg	J	Z
BORON	3.52	J	0.829	MDL	9.98	PQL	mg/Kg	J	Z
CADMIUM	0.331	J	0.0329	MDL	0.998	PQL	mg/Kg	J	Z
CALCIUM	2130		4.01	MDL	20.0	PQL	mg/Kg	J	Q
MOLYBDENUM	0.748	J	0.170	MDL	2.00	PQL	mg/Kg	U	B, B, F, F
NICKEL	13.3		0.110	MDL	2.00	PQL	mg/Kg	J	A
PHOSPHORUS	370		0.509	MDL	9.98	PQL	mg/Kg	J	Q
SODIUM	65.6	J	16.7	MDL	99.8	PQL	mg/Kg	J	Z
TIN	2.74	J	0.220	MDL	9.98	PQL	mg/Kg	U	B
Zirconium	3.62	J	0.829	MDL	4.99	PQL	mg/Kg	J	Z

Sample ID: SL-831-SA5A-SB-4.5-5.5 **Collected:** 5/29/2013 9:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.540	J	0.517	MDL	4.14	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.686	J	0.0693	MDL	1.03	PQL	mg/Kg	J	Z
BORON	1.51	J	0.859	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.154	J	0.0341	MDL	1.03	PQL	mg/Kg	J	Z
CALCIUM	1820		4.16	MDL	20.7	PQL	mg/Kg	J	Q
MOLYBDENUM	0.587	J	0.176	MDL	2.07	PQL	mg/Kg	U	B, B, F, F
NICKEL	9.43		0.114	MDL	2.07	PQL	mg/Kg	J	A
PHOSPHORUS	144		0.528	MDL	10.3	PQL	mg/Kg	J	Q
SODIUM	87.0	J	17.3	MDL	103	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-831-SA5A-SB-4.5-5.5** ***Collected:*** **5/29/2013 9:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.87	J	0.228	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	3.67	J	0.859	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 9:50:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.526	J	0.498	MDL	3.98	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.614	J	0.0667	MDL	0.995	PQL	mg/Kg	J	Z
BORON	2.72	J	0.826	MDL	9.95	PQL	mg/Kg	J	Z
CADMIUM	0.306	J	0.0328	MDL	0.995	PQL	mg/Kg	J	Z
CALCIUM	1850		4.00	MDL	19.9	PQL	mg/Kg	J	Q
MOLYBDENUM	0.735	J	0.169	MDL	1.99	PQL	mg/Kg	U	B, B, F, F
NICKEL	12.9		0.109	MDL	1.99	PQL	mg/Kg	J	A
PHOSPHORUS	365		0.508	MDL	9.95	PQL	mg/Kg	J	Q
SODIUM	66.7	J	16.6	MDL	99.5	PQL	mg/Kg	J	Z
TIN	2.52	J	0.219	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.826	MDL	4.98	PQL	mg/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-4.0-5.0** ***Collected:*** **5/29/2013 10:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.610	J	0.508	MDL	4.06	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.701	J	0.0681	MDL	1.02	PQL	mg/Kg	J	Z
BORON	2.52	J	0.843	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.214	J	0.0335	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	2160		4.08	MDL	20.3	PQL	mg/Kg	J	Q
MOLYBDENUM	0.752	J	0.173	MDL	2.03	PQL	mg/Kg	U	B, B, F, F
NICKEL	12.5		0.112	MDL	2.03	PQL	mg/Kg	J	A
PHOSPHORUS	242		0.518	MDL	10.2	PQL	mg/Kg	J	Q
SODIUM	86.7	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	2.83	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	3.95	J	0.843	MDL	5.08	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-832-SA5A-SB-7.2-8.2** ***Collected:*** **5/29/2013 10:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.753	J	0.506	MDL	4.05	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.607	J	0.0678	MDL	1.01	PQL	mg/Kg	J	Z
BORON	1.61	J	0.839	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.143	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	1850		4.07	MDL	20.2	PQL	mg/Kg	J	Q
MOLYBDENUM	0.494	J	0.172	MDL	2.02	PQL	mg/Kg	U	B, B, F, F
NICKEL	9.21		0.111	MDL	2.02	PQL	mg/Kg	J	A
PHOSPHORUS	121		0.516	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	94.3	J	16.9	MDL	101	PQL	mg/Kg	J	Z
TIN	2.81	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.50	J	0.839	MDL	5.06	PQL	mg/Kg	J	Z

Sample ID: **SL-842-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 11:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.539	J	0.495	MDL	3.96	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.603	J	0.0663	MDL	0.990	PQL	mg/Kg	J	Z
BORON	2.63	J	0.822	MDL	9.90	PQL	mg/Kg	J	Z
CADMIUM	0.308	J	0.0327	MDL	0.990	PQL	mg/Kg	J	Z
CALCIUM	2160		3.98	MDL	19.8	PQL	mg/Kg	J	Q
MOLYBDENUM	0.685	J	0.168	MDL	1.98	PQL	mg/Kg	U	B, B, F, F
NICKEL	12.3		0.109	MDL	1.98	PQL	mg/Kg	J	A
PHOSPHORUS	327		0.505	MDL	9.90	PQL	mg/Kg	J	Q
SODIUM	63.4	J	16.5	MDL	99.0	PQL	mg/Kg	J	Z
TIN	2.71	J	0.218	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.822	MDL	4.95	PQL	mg/Kg	J	Z

Sample ID: **SL-844-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 1:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.621	J	0.492	MDL	3.93	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.611	J	0.0659	MDL	0.983	PQL	mg/Kg	J	Z
BORON	2.28	J	0.816	MDL	9.83	PQL	mg/Kg	J	Z
CADMIUM	0.182	J	0.0324	MDL	0.983	PQL	mg/Kg	J	Z
CALCIUM	1640		3.95	MDL	19.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-844-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 1:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.603	J	0.167	MDL	1.97	PQL	mg/Kg	U	B, B, F, F
NICKEL	10.6		0.108	MDL	1.97	PQL	mg/Kg	J	A
PHOSPHORUS	222		0.501	MDL	9.83	PQL	mg/Kg	J	Q
SODIUM	61.9	J	16.4	MDL	98.3	PQL	mg/Kg	J	Z
TIN	2.49	J	0.216	MDL	9.83	PQL	mg/Kg	U	B
Zirconium	3.40	J	0.816	MDL	4.92	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-831-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 8:35:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	21.7		0.0339	MDL	0.399	PQL	mg/Kg	J	Q

Sample ID: SL-831-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 8:35:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0523	J	0.0200	MDL	0.200	PQL	mg/Kg	J	Z

Sample ID: SL-831-SA5A-SB-4.5-5.5 *Collected:* 5/29/2013 9:30:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	17.3		0.0352	MDL	0.414	PQL	mg/Kg	J	Q

Sample ID: SL-831-SA5A-SB-4.5-5.5 *Collected:* 5/29/2013 9:30:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0626	J	0.0207	MDL	0.207	PQL	mg/Kg	J	Z

Sample ID: SL-832-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 9:50:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	20.0		0.0338	MDL	0.398	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **SO**

Sample ID: **SL-832-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 9:50:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0995	MDL	0.398	PQL	mg/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 9:50:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0415	J	0.0199	MDL	0.199	PQL	mg/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-4.0-5.0** ***Collected:*** **5/29/2013 10:30:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	23.2		0.0345	MDL	0.406	PQL	mg/Kg	J	Q

Sample ID: **SL-832-SA5A-SB-4.0-5.0** ***Collected:*** **5/29/2013 10:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0350	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-7.2-8.2** ***Collected:*** **5/29/2013 10:35:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	17.2		0.0344	MDL	0.405	PQL	mg/Kg	J	Q

Sample ID: **SL-832-SA5A-SB-7.2-8.2** ***Collected:*** **5/29/2013 10:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0581	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z

Sample ID: **SL-842-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 11:05:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	22.0		0.0337	MDL	0.396	PQL	mg/Kg	J	Q

Sample ID: **SL-842-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 11:05:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0990	MDL	0.396	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-842-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 11:05:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0605	J	0.0198	MDL	0.198	PQL	mg/Kg	J	Z

Sample ID: SL-844-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 1:45:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	16.1		0.0334	MDL	0.393	PQL	mg/Kg	J	Q

Sample ID: SL-844-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 1:45:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0479	J	0.0197	MDL	0.197	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-831-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 8:35:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0110	J	0.0101	MDL	0.0168	PQL	mg/Kg	J	Z

Sample ID: SL-832-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 9:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0098	MDL	0.0163	PQL	mg/Kg	J	Z

Sample ID: SL-832-SA5A-SB-4.0-5.0 *Collected:* 5/29/2013 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0099	MDL	0.0165	PQL	mg/Kg	J	Z

Sample ID: SL-842-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 11:05:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0132	J	0.0093	MDL	0.0156	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB-052913 *Collected:* 5/29/2013 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.402	JB	0.0813	MDL	9.93	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.358	JBQ	0.0431	MDL	9.93	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.237	JB	0.0499	MDL	9.93	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.163	JBQ	0.0841	MDL	9.93	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.145	JB	0.0683	MDL	9.93	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.131	JBQ	0.0882	MDL	9.93	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.163	JBQ	0.0895	MDL	9.93	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.116	JBQ	0.0692	MDL	9.93	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.283	JBQ	0.118	MDL	9.93	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.463	JBQ	0.0724	MDL	9.93	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.220	JBQ	0.0628	MDL	9.93	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.232	JB	0.0698	MDL	9.93	PQL	pg/L	U	B
2,3,7,8-TCDD	0.137	JBQ	0.133	MDL	1.99	PQL	pg/L	U	B
OCDD	0.689	JB	0.0997	MDL	19.9	PQL	pg/L	U	B
OCDF	0.687	JBQ	0.144	MDL	19.9	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-831-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	3.96	J	0.130	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.12	JB	0.133	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.43	JB	0.138	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.898	JB	0.147	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.59	JQ	0.159	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.42	JQ	0.0762	MDL	5.02	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	4.30	JB	0.129	MDL	5.02	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.25	J	0.0688	MDL	5.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.124	JQ	0.0853	MDL	1.00	PQL	ng/Kg	J	Z
OCDD	5720	BE	0.231	MDL	10.0	PQL	ng/Kg	J	*XI

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-831-SA5A-SB-4.5-5.5** ***Collected:*** **5/29/2013 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.63	JB	0.0904	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.02	JB	0.0268	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0795	JQ	0.0360	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0738	J	0.0494	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0743	JBQ	0.0257	MDL	5.02	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.223	JQ	0.0542	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0685	JBQ	0.0249	MDL	5.02	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.205	J	0.0521	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0744	JQ	0.0590	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0564	JQ	0.0203	MDL	5.02	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0312	JBQ	0.0286	MDL	5.02	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0654	JQ	0.0193	MDL	5.02	PQL	ng/Kg	J	Z
OCDF	3.91	JB	0.0449	MDL	10.0	PQL	ng/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.946	J	0.0652	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.576	J	0.0830	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.329	JB	0.0685	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.36	J	0.0849	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.502	JBQ	0.0691	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.58	J	0.0852	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.249	JB	0.0779	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.348	JQ	0.0583	MDL	4.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.307	J	0.0307	MDL	4.94	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.489	JB	0.0673	MDL	4.94	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.165	JQ	0.0298	MDL	4.94	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0777	JQ	0.0615	MDL	0.988	PQL	ng/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-4.0-5.0** ***Collected:*** **5/29/2013 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.10	JB	0.0263	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.237	J	0.0386	MDL	5.08	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-832-SA5A-SB-4.0-5.0** ***Collected:*** **5/29/2013 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.141	JQ	0.0469	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0797	JBQ	0.0413	MDL	5.08	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.366	JQ	0.0501	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.123	JB	0.0382	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.400	JQ	0.0476	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.125	JBQ	0.0438	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0742	JQ	0.0213	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.175	JB	0.0375	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0575	JQ	0.0195	MDL	5.08	PQL	ng/Kg	J	Z
OCDF	6.79	JB	0.0427	MDL	10.2	PQL	ng/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-7.2-8.2** ***Collected:*** **5/29/2013 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.128	JBQ	0.0313	MDL	5.14	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0367	JBQ	0.0117	MDL	5.14	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0204	JQ	0.0161	MDL	5.14	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0278	JBQ	0.0127	MDL	5.14	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0246	JBQ	0.0124	MDL	5.14	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0527	JQ	0.0271	MDL	5.14	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0196	JBQ	0.0149	MDL	5.14	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0317	JQ	0.0200	MDL	5.14	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0197	JBQ	0.0130	MDL	5.14	PQL	ng/Kg	U	B
OCDD	0.440	JB	0.0401	MDL	10.3	PQL	ng/Kg	U	B
OCDF	0.0854	JB	0.0359	MDL	10.3	PQL	ng/Kg	U	B

Sample ID: **SL-842-SA5A-SB-0.0-0.5** ***Collected:*** **5/29/2013 11:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.915	JB	0.143	MDL	4.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.26	J	0.113	MDL	4.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.597	J	0.0505	MDL	4.81	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.653	J	0.0467	MDL	4.81	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.153	J	0.0472	MDL	0.963	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.209	JQ	0.0864	MDL	0.963	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-842-SA5A-SB-0.0-0.5 **Collected: 5/29/2013 11:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	13500	BE	0.207	MDL	9.63	PQL	ng/Kg	J	*XI

Sample ID: SL-843-SA5A-SB-0.0-0.5 **Collected: 5/29/2013 2:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.32	JB	0.0487	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.376	J	0.0677	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.220	J	0.0596	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.499	JBQ	0.0565	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.443	J	0.0635	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.269	JBQ	0.0566	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.365	J	0.0631	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.107	JBQ	0.0730	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.346	JQ	0.0623	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.408	J	0.0307	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.205	JB	0.0603	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.241	J	0.0305	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.167	JQ	0.0644	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: SL-844-SA5A-SB-0.0-0.5 **Collected: 5/29/2013 1:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.06	JB	0.0939	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.52	JB	0.0684	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.218	JQ	0.101	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.264	JQ	0.0607	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.251	JBQ	0.0701	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.355	J	0.0673	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.297	JB	0.0674	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.448	JQ	0.0638	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.124	JB	0.0774	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.231	JQ	0.0589	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.380	J	0.0330	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.189	JBQ	0.0703	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.235	JQ	0.0303	MDL	5.07	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-844-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0459	JQ	0.0455	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0514	JQ	0.0495	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	4.69	JB	0.0520	MDL	10.1	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-831-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.2	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-831-SA5A-SB-4.5-5.5 *Collected:* 5/29/2013 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.7	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

Sample ID: SL-844-SA5A-SB-0.0-0.5 *Collected:* 5/29/2013 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	4.6	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270D SIM **Matrix: AQ**

Sample ID: EB-052913 *Collected:* 5/29/2013 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.094	J	0.055	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.27	J	0.055	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.17	J	0.055	MDL	1.1	PQL	ug/L	J	Z
NAPHTHALENE	0.033	J	0.033	MDL	0.055	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-831-SA5A-SB-0.0-0.5** *Collected:* **5/29/2013 8:35:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.71	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-0.0-0.5** *Collected:* **5/29/2013 9:50:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.77	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.94	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-832-SA5A-SB-4.0-5.0** *Collected:* **5/29/2013 10:30:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.46	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-842-SA5A-SB-0.0-0.5** *Collected:* **5/29/2013 11:05:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.47	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.83	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.90	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.79	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-844-SA5A-SB-0.0-0.5** *Collected:* **5/29/2013 1:45:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.48	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Reason Code Legend

Reason Code	*Description*
*XI	Exceeded Calibration Range
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
F	Equipment Blank Contamination
F	Field Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

PH042

Method Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1550B370622	6/7/2013 6:22:00 AM	1,2,3,4,6,7,8-HPCDD	0.337 pg/L	EB-052913
		1,2,3,4,6,7,8-HPCDF	0.359 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.195 pg/L	
		1,2,3,4,7,8-HxCDD	0.226 pg/L	
		1,2,3,4,7,8-HXCDF	0.339 pg/L	
		1,2,3,6,7,8-HXCDD	0.224 pg/L	
		1,2,3,6,7,8-HXCDF	0.205 pg/L	
		1,2,3,7,8,9-HXCDD	0.103 pg/L	
		1,2,3,7,8,9-HXCDF	0.297 pg/L	
		1,2,3,7,8-PECDD	0.271 pg/L	
		1,2,3,7,8-PECDF	0.516 pg/L	
		2,3,4,6,7,8-HXCDF	0.203 pg/L	
		2,3,4,7,8-PECDF	0.268 pg/L	
		2,3,7,8-TCDD	0.133 pg/L	
		OCDD	0.859 pg/L	
		OCDF	0.843 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB-052913(RES)	1,2,3,4,6,7,8-HPCDD	0.402 pg/L	0.402U pg/L
EB-052913(RES)	1,2,3,4,6,7,8-HPCDF	0.358 pg/L	0.358U pg/L
EB-052913(RES)	1,2,3,4,7,8,9-HPCDF	0.237 pg/L	0.237U pg/L
EB-052913(RES)	1,2,3,4,7,8-HxCDD	0.163 pg/L	0.163U pg/L
EB-052913(RES)	1,2,3,4,7,8-HXCDF	0.145 pg/L	0.145U pg/L
EB-052913(RES)	1,2,3,6,7,8-HXCDD	0.131 pg/L	0.131U pg/L
EB-052913(RES)	1,2,3,7,8,9-HXCDD	0.163 pg/L	0.163U pg/L
EB-052913(RES)	1,2,3,7,8,9-HXCDF	0.116 pg/L	0.116U pg/L
EB-052913(RES)	1,2,3,7,8-PECDD	0.283 pg/L	0.283U pg/L
EB-052913(RES)	1,2,3,7,8-PECDF	0.463 pg/L	0.463U pg/L
EB-052913(RES)	2,3,4,6,7,8-HXCDF	0.220 pg/L	0.220U pg/L
EB-052913(RES)	2,3,4,7,8-PECDF	0.232 pg/L	0.232U pg/L
EB-052913(RES)	2,3,7,8-TCDD	0.137 pg/L	0.137U pg/L
EB-052913(RES)	OCDD	0.689 pg/L	0.689U pg/L
EB-052913(RES)	OCDF	0.687 pg/L	0.687U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1540B371936	6/4/2013 7:36:00 PM	1,2,3,4,6,7,8-HPCDD	0.0620 ng/Kg	SL-831-SA5A-SB-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0289 ng/Kg	SL-831-SA5A-SB-4.5-5.5
		1,2,3,4,7,8-HXCDF	0.0303 ng/Kg	SL-832-SA5A-SB-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0202 ng/Kg	SL-832-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0236 ng/Kg	SL-832-SA5A-SB-7.2-8.2
		2,3,4,6,7,8-HXCDF	0.0317 ng/Kg	SL-842-SA5A-SB-0.0-0.5
		OCDD	0.267 ng/Kg	SL-843-SA5A-SB-0.0-0.5
		OCDF	0.0812 ng/Kg	SL-844-SA5A-SB-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-831-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HXCDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-831-SA5A-SB-4.5-5.5(RES)	1,2,3,6,7,8-HXCDF	0.0685 ng/Kg	0.0685U ng/Kg
SL-831-SA5A-SB-4.5-5.5(RES)	2,3,4,6,7,8-HXCDF	0.0312 ng/Kg	0.0312U ng/Kg
SL-832-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0797 ng/Kg	0.0797U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	1,2,3,4,6,7,8-HPCDD	0.128 ng/Kg	0.128U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	1,2,3,4,6,7,8-HPCDF	0.0367 ng/Kg	0.0367U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	1,2,3,4,7,8-HXCDF	0.0278 ng/Kg	0.0278U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	1,2,3,6,7,8-HXCDF	0.0246 ng/Kg	0.0246U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	1,2,3,7,8,9-HXCDF	0.0196 ng/Kg	0.0196U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	2,3,4,6,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	OCDD	0.440 ng/Kg	0.440U ng/Kg
SL-832-SA5A-SB-7.2-8.2(RES)	OCDF	0.0854 ng/Kg	0.0854U ng/Kg
SL-843-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.107 ng/Kg	0.107U ng/Kg

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15635AB221848	6/6/2013 6:48:00 PM	ANTIMONY	0.0037 mg/L	EB-052913
		CALCIUM	0.0711 mg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB-052913(REA/TOT)	CALCIUM	0.0718 mg/L	0.0718U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB221750	6/4/2013 5:50:00 PM	CALCIUM	6.04 mg/Kg	SL-831-SA5A-SB-0.0-0.5
		CHROMIUM	0.279 mg/Kg	SL-831-SA5A-SB-4.5-5.5
		IRON	4.01 mg/Kg	SL-832-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.215 mg/Kg	SL-832-SA5A-SB-4.0-5.0
		NICKEL	0.323 mg/Kg	SL-832-SA5A-SB-7.2-8.2
		PHOSPHORUS	1.44 mg/Kg	SL-842-SA5A-SB-0.0-0.5
		TIN	1.46 mg/Kg	SL-844-SA5A-SB-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-831-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.748 mg/Kg	0.748U mg/Kg
SL-831-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-831-SA5A-SB-4.5-5.5(RES/TOT)	MOLYBDENUM	0.587 mg/Kg	0.587U mg/Kg
SL-831-SA5A-SB-4.5-5.5(RES/TOT)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-832-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.735 mg/Kg	0.735U mg/Kg
SL-832-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-832-SA5A-SB-4.0-5.0(RES/TOT)	MOLYBDENUM	0.752 mg/Kg	0.752U mg/Kg
SL-832-SA5A-SB-4.0-5.0(RES/TOT)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-832-SA5A-SB-7.2-8.2(RES/TOT)	MOLYBDENUM	0.494 mg/Kg	0.494U mg/Kg
SL-832-SA5A-SB-7.2-8.2(RES/TOT)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-842-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.685 mg/Kg	0.685U mg/Kg
SL-842-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-844-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.603 mg/Kg	0.603U mg/Kg
SL-844-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.49 mg/Kg	2.49U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB222006A	6/9/2013 8:06:00 PM	STRONTIUM	0.0361 mg/Kg	SL-831-SA5A-SB-0.0-0.5
				SL-831-SA5A-SB-4.5-5.5
				SL-832-SA5A-SB-0.0-0.5
				SL-832-SA5A-SB-4.0-5.0
				SL-832-SA5A-SB-7.2-8.2
				SL-842-SA5A-SB-0.0-0.5
				SL-844-SA5A-SB-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **8270D SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC15B261512	6/10/2013 3:12:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.17 ug/L	EB-052913

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB-052913(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.094 ug/L	1.1U ug/L

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-052913(REA/TOT)	5/29/2013 3:00:00 PM	CALCIUM	0.0718 mg/L	SL-831-SA5A-SB-0.0-0.5
		MANGANESE	0.0013 mg/L	SL-831-SA5A-SB-4.5-5.5
		MOLYBDENUM	0.0049 mg/L	SL-832-SA5A-SB-0.0-0.5
				SL-832-SA5A-SB-4.0-5.0
				SL-832-SA5A-SB-7.2-8.2
				SL-842-SA5A-SB-0.0-0.5
				SL-843-SA5A-SB-0.0-0.5
				SL-844-SA5A-SB-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-831-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.748 mg/Kg	0.748U mg/Kg
SL-831-SA5A-SB-4.5-5.5(RES/TOT)	MOLYBDENUM	0.587 mg/Kg	0.587U mg/Kg
SL-832-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.735 mg/Kg	0.735U mg/Kg
SL-832-SA5A-SB-4.0-5.0(RES/TOT)	MOLYBDENUM	0.752 mg/Kg	0.752U mg/Kg
SL-832-SA5A-SB-7.2-8.2(RES/TOT)	MOLYBDENUM	0.494 mg/Kg	0.494U mg/Kg
SL-842-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.685 mg/Kg	0.685U mg/Kg
SL-844-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.603 mg/Kg	0.603U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2/TOT)	4/11/2013 3:00:00 PM	COPPER	0.0036 mg/L	SL-831-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0036 mg/L	SL-831-SA5A-SB-4.5-5.5
				SL-832-SA5A-SB-0.0-0.5
				SL-832-SA5A-SB-4.0-5.0
				SL-832-SA5A-SB-7.2-8.2
				SL-842-SA5A-SB-0.0-0.5
				SL-843-SA5A-SB-0.0-0.5
				SL-844-SA5A-SB-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-831-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.748 mg/Kg	0.748U mg/Kg
SL-831-SA5A-SB-4.5-5.5(RES/TOT)	MOLYBDENUM	0.587 mg/Kg	0.587U mg/Kg
SL-832-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.735 mg/Kg	0.735U mg/Kg
SL-832-SA5A-SB-4.0-5.0(RES/TOT)	MOLYBDENUM	0.752 mg/Kg	0.752U mg/Kg
SL-832-SA5A-SB-7.2-8.2(RES/TOT)	MOLYBDENUM	0.494 mg/Kg	0.494U mg/Kg
SL-842-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.685 mg/Kg	0.685U mg/Kg
SL-844-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.603 mg/Kg	0.603U mg/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-052913	1,2,3,4,6,7,8-HPCDD	JB	0.402	9.93	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.358	9.93	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.237	9.93	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.163	9.93	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.145	9.93	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.131	9.93	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.163	9.93	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.116	9.93	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.283	9.93	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.463	9.93	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.220	9.93	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.232	9.93	PQL	pg/L	
	2,3,7,8-TCDD	JBQ	0.137	1.99	PQL	pg/L	
	OCDD	JB	0.689	19.9	PQL	pg/L	
	OCDF	JBQ	0.687	19.9	PQL	pg/L	

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-052913	CALCIUM	J	0.0718	0.400	PQL	mg/L	
	MANGANESE	J	0.0013	0.0100	PQL	mg/L	J (all detects)
	MOLYBDENUM	J	0.0049	0.0200	PQL	mg/L	

Method: 8270D SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-052913	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.094	1.1	PQL	ug/L	
	Diethylphthalate	J	0.27	1.1	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.17	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.033	0.055	PQL	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	1,2,3,4,7,8-HxCDD	J	3.96	5.02	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.12	5.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.43	5.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.898	5.02	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	1.59	5.02	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JQ	1.42	5.02	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	4.30	5.02	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	1.25	5.02	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.124	1.00	PQL	ng/Kg	
SL-831-SA5A-SB-4.5-5.5	1,2,3,4,6,7,8-HPCDD	JB	4.63	5.02	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.02	5.02	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.0795	5.02	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0738	5.02	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0743	5.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.223	5.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0685	5.02	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.205	5.02	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0744	5.02	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0564	5.02	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0312	5.02	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0654	5.02	PQL	ng/Kg	
	OCDF	JB	3.91	10.0	PQL	ng/Kg	
SL-832-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	0.946	4.94	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.576	4.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.329	4.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	1.36	4.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.502	4.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.58	4.94	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.249	4.94	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.348	4.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.307	4.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.489	4.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.165	4.94	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0777	0.988	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-832-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	2.10	5.08	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.237	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.141	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0797	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.366	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.123	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JQ	0.400	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.125	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0742	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.175	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0575	5.08	PQL	ng/Kg	
	OCDF	JB	6.79	10.2	PQL	ng/Kg	
SL-832-SA5A-SB-7.2-8.2	1,2,3,4,6,7,8-HPCDD	JBQ	0.128	5.14	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0367	5.14	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.0204	5.14	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0278	5.14	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0246	5.14	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.0527	5.14	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0196	5.14	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0317	5.14	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0197	5.14	PQL	ng/Kg	
	OCDD	JB	0.440	10.3	PQL	ng/Kg	
	OCDF	JB	0.0854	10.3	PQL	ng/Kg	
SL-842-SA5A-SB-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	0.915	4.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	2.26	4.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.597	4.81	PQL	ng/Kg	J (all detects)
	2,3,4,7,8-PECDF	J	0.653	4.81	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.153	0.963	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.209	0.963	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-843-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.32	5.07	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.376	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.220	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.499	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.443	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.269	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.365	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.107	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.346	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.408	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.205	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.241	5.07	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.167	1.01	PQL	ng/Kg	
SL-844-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.06	5.07	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.52	5.07	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.218	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.264	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.251	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.355	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.297	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.448	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.124	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.231	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.380	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.189	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.235	5.07	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0459	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0514	1.01	PQL	ng/Kg	
	OCDF	JB	4.69	10.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	ANTIMONY	J	0.539	3.99	PQL	mg/Kg	
	BERYLLIUM	J	0.639	0.998	PQL	mg/Kg	
	BORON	J	3.52	9.98	PQL	mg/Kg	
	CADMIUM	J	0.331	0.998	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.748	2.00	PQL	mg/Kg	
	SODIUM	J	65.6	99.8	PQL	mg/Kg	
	TIN	J	2.74	9.98	PQL	mg/Kg	
	Zirconium	J	3.62	4.99	PQL	mg/Kg	
SL-831-SA5A-SB-4.5-5.5	ANTIMONY	J	0.540	4.14	PQL	mg/Kg	
	BERYLLIUM	J	0.686	1.03	PQL	mg/Kg	
	BORON	J	1.51	10.3	PQL	mg/Kg	
	CADMIUM	J	0.154	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.587	2.07	PQL	mg/Kg	
	SODIUM	J	87.0	103	PQL	mg/Kg	
	TIN	J	2.87	10.3	PQL	mg/Kg	
	Zirconium	J	3.67	5.17	PQL	mg/Kg	
SL-832-SA5A-SB-0.0-0.5	ANTIMONY	J	0.526	3.98	PQL	mg/Kg	
	BERYLLIUM	J	0.614	0.995	PQL	mg/Kg	
	BORON	J	2.72	9.95	PQL	mg/Kg	
	CADMIUM	J	0.306	0.995	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.735	1.99	PQL	mg/Kg	
	SODIUM	J	66.7	99.5	PQL	mg/Kg	
	TIN	J	2.52	9.95	PQL	mg/Kg	
	Zirconium	J	3.29	4.98	PQL	mg/Kg	
SL-832-SA5A-SB-4.0-5.0	ANTIMONY	J	0.610	4.06	PQL	mg/Kg	
	BERYLLIUM	J	0.701	1.02	PQL	mg/Kg	
	BORON	J	2.52	10.2	PQL	mg/Kg	
	CADMIUM	J	0.214	1.02	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.752	2.03	PQL	mg/Kg	
	SODIUM	J	86.7	102	PQL	mg/Kg	
	TIN	J	2.83	10.2	PQL	mg/Kg	
	Zirconium	J	3.95	5.08	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-832-SA5A-SB-7.2-8.2	ANTIMONY	J	0.753	4.05	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.607	1.01	PQL	mg/Kg	
	BORON	J	1.61	10.1	PQL	mg/Kg	
	CADMIUM	J	0.143	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.494	2.02	PQL	mg/Kg	
	SODIUM	J	94.3	101	PQL	mg/Kg	
	TIN	J	2.81	10.1	PQL	mg/Kg	
	Zirconium	J	3.50	5.06	PQL	mg/Kg	
SL-842-SA5A-SB-0.0-0.5	ANTIMONY	J	0.539	3.96	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.603	0.990	PQL	mg/Kg	
	BORON	J	2.63	9.90	PQL	mg/Kg	
	CADMIUM	J	0.308	0.990	PQL	mg/Kg	
	MOLYBDENUM	J	0.685	1.98	PQL	mg/Kg	
	SODIUM	J	63.4	99.0	PQL	mg/Kg	
	TIN	J	2.71	9.90	PQL	mg/Kg	
	Zirconium	J	3.42	4.95	PQL	mg/Kg	
SL-844-SA5A-SB-0.0-0.5	ANTIMONY	J	0.621	3.93	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.611	0.983	PQL	mg/Kg	
	BORON	J	2.28	9.83	PQL	mg/Kg	
	CADMIUM	J	0.182	0.983	PQL	mg/Kg	
	MOLYBDENUM	J	0.603	1.97	PQL	mg/Kg	
	SODIUM	J	61.9	98.3	PQL	mg/Kg	
	TIN	J	2.49	9.83	PQL	mg/Kg	
	Zirconium	J	3.40	4.92	PQL	mg/Kg	

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	SILVER	J	0.0523	0.200	PQL	mg/Kg	J (all detects)
SL-831-SA5A-SB-4.5-5.5	SILVER	J	0.0626	0.207	PQL	mg/Kg	J (all detects)
SL-832-SA5A-SB-0.0-0.5	SELENIUM	J	0.144	0.398	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0415	0.199	PQL	mg/Kg	
SL-832-SA5A-SB-4.0-5.0	SILVER	J	0.0350	0.203	PQL	mg/Kg	J (all detects)
SL-832-SA5A-SB-7.2-8.2	SILVER	J	0.0581	0.202	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-842-SA5A-SB-0.0-0.5	SELENIUM	J	0.102	0.396	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0605	0.198	PQL	mg/Kg	
SL-844-SA5A-SB-0.0-0.5	SILVER	J	0.0479	0.197	PQL	mg/Kg	J (all detects)

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	MERCURY	J	0.0110	0.0168	PQL	mg/Kg	J (all detects)
SL-832-SA5A-SB-0.0-0.5	MERCURY	J	0.0109	0.0163	PQL	mg/Kg	J (all detects)
SL-832-SA5A-SB-4.0-5.0	MERCURY	J	0.0102	0.0165	PQL	mg/Kg	J (all detects)
SL-842-SA5A-SB-0.0-0.5	MERCURY	J	0.0132	0.0156	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	EFH (C15-C20)	J	3.2	5.1	PQL	mg/Kg	J (all detects)
SL-831-SA5A-SB-4.5-5.5	EFH (C21-C30)	J	3.7	5.2	PQL	mg/Kg	J (all detects)
SL-844-SA5A-SB-0.0-0.5	EFH (C21-C30)	J	4.6	5.1	PQL	mg/Kg	J (all detects)

Method: 8270D SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-831-SA5A-SB-0.0-0.5	BENZO(A)PYRENE	J	0.71	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
SL-832-SA5A-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.77	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.7	PQL	ug/Kg	
	PYRENE	J	0.94	1.7	PQL	ug/Kg	
SL-832-SA5A-SB-4.0-5.0	CHRYSENE	J	0.46	1.7	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH042 **Laboratory: LL**

EDD Filename: PrepPH042_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-842-SA5A-SB-0.0-0.5	ANTHRACENE	J	0.47	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.83	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.90	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.79	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
SL-844-SA5A-SB-0.0-0.5	CHRYSENE	J	0.48	1.7	PQL	ug/Kg	J (all detects)

LDC #: 30037B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/25/13

SDG #: PH042 ADR Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories Reviewer: AL

2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A AL –	Sampling dates: 5/29/13
II.	ICP/MS Tune	A –	
III.	Calibration	A –	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	–	
VI.	Matrix Spike Analysis	SW	MS/D (from PH044) all soil
VII.	Duplicate Sample Analysis	NA	Dup ↓
VIII.	Laboratory Control Samples (LCS)	NA	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(from PH044) Ni (14%D): J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	–	
XV	Field Blanks	SW	EB=~~EB052813~~ EB: EB052813 (PH043) FB= FB-041113 (PH029)

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil/water

1	SL-831-SA5A-SB-0.0-0.5	11		21		31	
2	SL-831-SA5A-SB-4.5-5.5	12		22		32	
3	SL-832-SA5A-SB-0.0-0.5	13		23		33	
4	SL-832-SA5A-SB-4.0-5.0	14		24		34	
5	SL-832-SA5A-SB-7.2-8.2	15		25		35	
6	SL-842-SA5A-SB-0.0-0.5	16		26		36	
7	SL-844-SA5A-SB-0.0-0.5	17		27		37	
8	EB-052913 ✓	18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 30037B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	1	2	3	4	5	6	7		
Sb			3.1	1.55	0.54	0.54	0.53	0.61	0.75	0.54	0.62		
Mo			2.1	1.05	0.75	0.59	0.73	0.75	0.49	0.69	0.60		

Sample Concentration units, unless otherwise noted: mgL Associated Samples: All Water

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	8								
Mo			2.6	0.013	0.0049								

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 30037B4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CL
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg Reason: F
Sampling date: 4/11/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	1	2	3	4	5	6	7			
Cu	0.0036	1.8										
Mo	0.0036	1.8	0.75	0.59	0.73	0.75	0.49	0.69	0.60			

Sampling date: 5/29/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	EB-052913 (SDG: PH042)	Action Limit	1	2	3	4	5	6	7			
Ca	0.0718	35.9										
Mn	.0013	0.65										
Mo	0.0049	2.45	0.75	0.59	0.73	0.75	0.49	0.69	0.60			

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-May-2013	TB-053013	7076740	TB	5030B	8015M	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	3050B	6010C	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	3050B	6020A	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	3546	8015M	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	3546	8270D SIM	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	METHOD	1613B	III
30-May-2013	SL-837-SA5A-SB-0.0-0.5	7076734	N	METHOD	7471B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	3050B	6010C	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	3050B	6020A	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	3546	8015M	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	3546	8270D SIM	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	5035A	8015M	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	METHOD	1613B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5	7076735	N	METHOD	7471B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	3050B	6010C	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	3050B	6020A	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	3546	8015M	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	3546	8270D SIM	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	5035A	8015M	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	METHOD	1613B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MS	7076736	MS	METHOD	7471B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	3050B	6010C	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	3050B	6020A	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	3546	8015M	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	3546	8270D SIM	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	5035A	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	METHOD	1613B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5MSD	7076737	MSD	METHOD	7471B	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5DUP	7076738	DUP	3050B	6010C	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5DUP	7076738	DUP	3050B	6020A	III
30-May-2013	SL-837-SA5A-SB-4.5-5.5DUP	7076738	DUP	METHOD	7471B	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	3050B	6010C	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	3050B	6020A	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	3546	8015M	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	3546	8270D SIM	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	5035A	8015M	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	METHOD	1613B	III
30-May-2013	SL-1237-SA5A-SB-4.5-5.5	7076739	FD	METHOD	7471B	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	3050B	6010C	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	3050B	6020A	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	3546	8015M	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	3546	8270D SIM	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	METHOD	1613B	III
30-May-2013	SL-836-SA5A-SB-0.0-0.5	7076732	N	METHOD	7471B	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	3050B	6010C	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	3050B	6020A	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	3546	8015M	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	3546	8270D SIM	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	5035A	8015M	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	METHOD	1613B	III
30-May-2013	SL-836-SA5A-SB-2.5-3.5	7076733	N	METHOD	7471B	III
30-May-2013	SL-835-SA5A-SB-0.0-0.5	7076731	N	3546	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	3050B	6010C	III
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	3050B	6020A	III
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	3546	8015M	III
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	3546	8270D SIM	III
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	METHOD	1613B	III
30-May-2013	SL-834-SA5A-SB-0.0-0.5	7076745	N	METHOD	7471B	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	3050B	6010C	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	3050B	6020A	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	3546	8015M	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	3546	8270D SIM	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	5035A	8015M	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	METHOD	1613B	III
30-May-2013	SL-834-SA5A-SB-2.4-3.4	7076746	N	METHOD	7471B	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	3050B	6010C	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	3050B	6020A	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	3546	8015M	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	3546	8270D SIM	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	METHOD	1613B	III
30-May-2013	SL-833-SA5A-SB-0.0-0.5	7076743	N	METHOD	7471B	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	3050B	6010C	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	3050B	6020A	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	3546	8015M	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	3546	8270D SIM	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	5035A	8015M	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	METHOD	1613B	III
30-May-2013	SL-833-SA5A-SB-2.5-3.5	7076744	N	METHOD	7471B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	3050B	6010C	III
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	3050B	6020A	III
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	3546	8015M	III
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	3546	8270D SIM	III
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	METHOD	1613B	III
30-May-2013	SL-819-SA5A-SB-0.0-0.5	7076741	N	METHOD	7471B	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	3050B	6010C	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	3050B	6020A	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	3546	8015M	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	3546	8270D SIM	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	5035A	8015M	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	METHOD	1613B	III
30-May-2013	SL-819-SA5A-SB-6.5-7.5	7076742	N	METHOD	7471B	III
30-May-2013	EB-053013	7076730	EB	3005A	6010C	III
30-May-2013	EB-053013	7076730	EB	3510C	8015M	III
30-May-2013	EB-053013	7076730	EB	3510C	8270D SIM	III
30-May-2013	EB-053013	7076730	EB	5030B	8015M	III
30-May-2013	EB-053013	7076730	EB	M3010A	6020A	III
30-May-2013	EB-053013	7076730	EB	METHOD	1613B	III
30-May-2013	EB-053013	7076730	EB	METHOD	7470A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.517	J	0.513	MDL	4.10	PQL	mg/Kg	UJ	Q, B, FD, B
ARSENIC	7.84		0.338	MDL	4.10	PQL	mg/Kg	J	FD
BARIUM	102		0.0338	MDL	1.03	PQL	mg/Kg	J	FD
BERYLLIUM	0.884	J	0.0687	MDL	1.03	PQL	mg/Kg	J	Z, FD
BORON	1.63	J	0.851	MDL	10.3	PQL	mg/Kg	J	Z, FD
CADMIUM	0.187	J	0.0338	MDL	1.03	PQL	mg/Kg	J	Z, FD
CALCIUM	2710		4.12	MDL	20.5	PQL	mg/Kg	J	FD
CHROMIUM	23.5		0.0902	MDL	3.08	PQL	mg/Kg	J	FD
COBALT	6.77		0.0923	MDL	1.03	PQL	mg/Kg	J	E, FD
COPPER	10.6		0.185	MDL	2.05	PQL	mg/Kg	J	FD
LEAD	8.69		0.482	MDL	3.08	PQL	mg/Kg	J	FD
MAGNESIUM	4930		1.77	MDL	10.3	PQL	mg/Kg	J	FD
MANGANESE	299		0.0851	MDL	1.03	PQL	mg/Kg	J	E, FD
MOLYBDENUM	0.770	J	0.174	MDL	2.05	PQL	mg/Kg	U	F
NICKEL	13.5		0.113	MDL	2.05	PQL	mg/Kg	J	FD
POTASSIUM	1930		13.8	MDL	103	PQL	mg/Kg	J	Q
TIN	3.51	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
VANADIUM	47.2		0.113	MDL	1.03	PQL	mg/Kg	J	FD
Zirconium	5.05	J	0.851	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 2:30:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.704	J	0.503	MDL	4.02	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.685	J	0.0674	MDL	1.01	PQL	mg/Kg	J	Z
BORON	2.86	J	0.835	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.419	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
COBALT	6.63		0.0905	MDL	1.01	PQL	mg/Kg	J	E
MANGANESE	417		0.0835	MDL	1.01	PQL	mg/Kg	J	E
MOLYBDENUM	0.543	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
POTASSIUM	4090		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	94.6	J	16.8	MDL	101	PQL	mg/Kg	J	Z
TIN	2.90	J	0.221	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	4.18	J	0.835	MDL	5.03	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-819-SA5A-SB-6.5-7.5 *Collected:* 5/30/2013 2:45:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.24	J	0.548	MDL	4.38	PQL	mg/Kg	UJ	Q, B, B
CADMIUM	0.0427	J	0.0361	MDL	1.10	PQL	mg/Kg	J	Z
COBALT	4.74		0.0986	MDL	1.10	PQL	mg/Kg	J	E
MANGANESE	167		0.0909	MDL	1.10	PQL	mg/Kg	J	E
MOLYBDENUM	1.32	J	0.186	MDL	2.19	PQL	mg/Kg	U	F
POTASSIUM	1040		14.8	MDL	110	PQL	mg/Kg	J	Q
TIN	3.86	J	0.241	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.565	J	0.495	MDL	3.96	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.516	J	0.0663	MDL	0.990	PQL	mg/Kg	J	Z
BORON	2.49	J	0.821	MDL	9.90	PQL	mg/Kg	J	Z
CADMIUM	0.269	J	0.0327	MDL	0.990	PQL	mg/Kg	J	Z
COBALT	4.91		0.0891	MDL	0.990	PQL	mg/Kg	J	E
MANGANESE	292		0.0821	MDL	0.990	PQL	mg/Kg	J	E
MOLYBDENUM	0.402	J	0.168	MDL	1.98	PQL	mg/Kg	U	F
POTASSIUM	3150		13.4	MDL	99.0	PQL	mg/Kg	J	Q
SODIUM	69.4	J	16.5	MDL	99.0	PQL	mg/Kg	J	Z
TIN	2.65	J	0.218	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	3.36	J	0.821	MDL	4.95	PQL	mg/Kg	J	Z

Sample ID: SL-833-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 1:55:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.92		0.516	MDL	4.13	PQL	mg/Kg	J	Q
BERYLLIUM	0.673	J	0.0691	MDL	1.03	PQL	mg/Kg	J	Z
BORON	1.66	J	0.856	MDL	10.3	PQL	mg/Kg	J	Z
COBALT	7.52		0.0928	MDL	1.03	PQL	mg/Kg	J	E
MANGANESE	305		0.0856	MDL	1.03	PQL	mg/Kg	J	E
POTASSIUM	2690		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	84.3	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	8.14	J	0.227	MDL	10.3	PQL	mg/Kg	J	Z
Zirconium	4.10	J	0.856	MDL	5.16	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-833-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 1:55:00 *Analysis Type:* REA2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.53	J	0.340	MDL	4.13	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.563	J	0.508	MDL	4.07	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.545	J	0.0681	MDL	1.02	PQL	mg/Kg	J	Z
BORON	2.52	J	0.844	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.307	J	0.0335	MDL	1.02	PQL	mg/Kg	J	Z
COBALT	5.41		0.0915	MDL	1.02	PQL	mg/Kg	J	E
MANGANESE	316		0.0844	MDL	1.02	PQL	mg/Kg	J	E
MOLYBDENUM	0.413	J	0.173	MDL	2.03	PQL	mg/Kg	U	F
POTASSIUM	3290		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	74.5	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	2.64	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	3.52	J	0.844	MDL	5.08	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-2.4-3.4 *Collected:* 5/30/2013 1:10:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.954	J	0.517	MDL	4.13	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.781	J	0.0692	MDL	1.03	PQL	mg/Kg	J	Z
BORON	2.18	J	0.858	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.207	J	0.0341	MDL	1.03	PQL	mg/Kg	J	Z
COBALT	6.62		0.0930	MDL	1.03	PQL	mg/Kg	J	E
MANGANESE	326		0.0858	MDL	1.03	PQL	mg/Kg	J	E
MOLYBDENUM	0.562	J	0.176	MDL	2.07	PQL	mg/Kg	U	F
POTASSIUM	2780		14.0	MDL	103	PQL	mg/Kg	J	Q
SODIUM	88.5	J	17.3	MDL	103	PQL	mg/Kg	J	Z
TIN	2.94	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	4.74	J	0.858	MDL	5.17	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-836-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:20:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.734	J	0.557	MDL	4.46	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.548	J	0.0747	MDL	1.11	PQL	mg/Kg	J	Z
BORON	2.89	J	0.925	MDL	11.1	PQL	mg/Kg	J	Z
CADMIUM	0.332	J	0.0368	MDL	1.11	PQL	mg/Kg	J	Z
COBALT	5.52		0.100	MDL	1.11	PQL	mg/Kg	J	E
MANGANESE	319		0.0925	MDL	1.11	PQL	mg/Kg	J	E
MOLYBDENUM	0.480	J	0.189	MDL	2.23	PQL	mg/Kg	U	F
POTASSIUM	3520		15.0	MDL	111	PQL	mg/Kg	J	Q
SODIUM	80.8	J	18.6	MDL	111	PQL	mg/Kg	J	Z
TIN	2.88	J	0.245	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.08	J	0.925	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.881	J	0.515	MDL	4.12	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.753	J	0.0690	MDL	1.03	PQL	mg/Kg	J	Z
BORON	2.20	J	0.855	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.278	J	0.0340	MDL	1.03	PQL	mg/Kg	J	Z
COBALT	6.29		0.0927	MDL	1.03	PQL	mg/Kg	J	E
MANGANESE	318		0.0855	MDL	1.03	PQL	mg/Kg	J	E
MOLYBDENUM	0.516	J	0.175	MDL	2.06	PQL	mg/Kg	U	F
POTASSIUM	3140		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	89.2	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	3.06	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	4.60	J	0.855	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.727	J	0.514	MDL	4.11	PQL	mg/Kg	UJ	Q, B, B
BERYLLIUM	0.575	J	0.0689	MDL	1.03	PQL	mg/Kg	J	Z
BORON	2.88	J	0.853	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.394	J	0.0339	MDL	1.03	PQL	mg/Kg	J	Z
COBALT	5.54		0.0925	MDL	1.03	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	323		0.0853	MDL	1.03	PQL	mg/Kg	J	E
MOLYBDENUM	0.454	J	0.175	MDL	2.06	PQL	mg/Kg	U	F
POTASSIUM	3580		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	77.9	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	2.98	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	3.21	J	0.853	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* REA/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.22	J	0.530	MDL	4.24	PQL	mg/Kg	UJ	Q, B, FD, B
ARSENIC	3.74	J	0.350	MDL	4.24	PQL	mg/Kg	J	Z, FD
BARIUM	171		0.0350	MDL	1.06	PQL	mg/Kg	J	FD
BERYLLIUM	1.66		0.0710	MDL	1.06	PQL	mg/Kg	J	FD
BORON	10.6	U	0.880	MDL	10.6	PQL	mg/Kg	UJ	FD
CADMIUM	0.0392	J	0.0350	MDL	1.06	PQL	mg/Kg	J	Z, FD
CALCIUM	5340		4.26	MDL	21.2	PQL	mg/Kg	J	FD
CHROMIUM	51.2		0.0933	MDL	3.18	PQL	mg/Kg	J	FD
COBALT	13.1		0.0954	MDL	1.06	PQL	mg/Kg	J	E, FD
COPPER	28.7		0.191	MDL	2.12	PQL	mg/Kg	J	FD
LEAD	18.6		0.498	MDL	3.18	PQL	mg/Kg	J	FD
MAGNESIUM	10000		1.83	MDL	10.6	PQL	mg/Kg	J	FD
MANGANESE	518		0.0880	MDL	1.06	PQL	mg/Kg	J	E, FD
MOLYBDENUM	0.722	J	0.180	MDL	2.12	PQL	mg/Kg	U	F
NICKEL	27.0		0.117	MDL	2.12	PQL	mg/Kg	J	FD
POTASSIUM	2000		14.3	MDL	106	PQL	mg/Kg	J	Q
TIN	3.92	J	0.233	MDL	10.6	PQL	mg/Kg	U	B
VANADIUM	82.3		0.117	MDL	1.06	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.103	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0464	J	0.0205	MDL	0.205	PQL	mg/Kg	J	Z
STRONTIUM	23.4		0.0349	MDL	0.410	PQL	mg/Kg	J	FD

Sample ID: SL-819-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 2:30:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.101	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 2:30:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0589	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA5A-SB-6.5-7.5 *Collected:* 5/30/2013 2:45:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.110	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA5A-SB-6.5-7.5 *Collected:* 5/30/2013 2:45:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.174	J	0.0219	MDL	0.219	PQL	mg/Kg	J	Z

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0998	J	0.0990	MDL	0.396	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0443	J	0.0198	MDL	0.198	PQL	mg/Kg	J	Z

Sample ID: SL-833-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 1:55:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.103	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-833-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 1:55:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0338	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.102	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0456	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-2.4-3.4 *Collected:* 5/30/2013 1:10:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.103	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-2.4-3.4 *Collected:* 5/30/2013 1:10:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0541	J	0.0207	MDL	0.207	PQL	mg/Kg	J	Z

Sample ID: SL-836-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:20:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.111	MDL	0.446	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-836-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:20:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0354	J	0.0223	MDL	0.223	PQL	mg/Kg	J	Z

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.103	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0475	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.103	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.158	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.106	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0457	J	0.0212	MDL	0.212	PQL	mg/Kg	J	Z
STRONTIUM	45.7		0.0360	MDL	0.424	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0112	J	0.0104	MDL	0.0173	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0150	J	0.0103	MDL	0.0172	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0153	J	0.0107	MDL	0.0178	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB-053013 *Collected:* 5/30/2013 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.331	JBQ	0.110	MDL	10.9	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.388	JB	0.0429	MDL	10.9	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.204	JB	0.0511	MDL	10.9	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.107	MDL	10.9	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.225	JB	0.0597	MDL	10.9	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.147	JBQ	0.110	MDL	10.9	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.220	JBQ	0.0577	MDL	10.9	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.225	JBQ	0.0606	MDL	10.9	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.174	JB	0.128	MDL	10.9	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.361	JBQ	0.0781	MDL	10.9	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.228	JBQ	0.0597	MDL	10.9	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.219	JBQ	0.0695	MDL	10.9	PQL	pg/L	U	B
OCDD	0.810	JBQ	0.112	MDL	21.8	PQL	pg/L	U	B
OCDF	0.664	JBQ	0.121	MDL	21.8	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	42.3	B	0.101	MDL	5.08	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	11.1	B	0.0386	MDL	5.08	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.08	J	0.0545	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.625	J	0.0660	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.342	JB	0.0583	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	1.27	J	0.0743	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.560	JB	0.0574	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	1.59	J	0.0693	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.143	JB	0.0628	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDD	0.390	J	0.0499	MDL	5.08	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.261	J	0.0300	MDL	5.08	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.529	JB	0.0587	MDL	5.08	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.171	J	0.0281	MDL	5.08	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDD	0.0465	JQ	0.0420	MDL	1.02	PQL	ng/Kg	J	Z, FD
OCDD	472	B	0.0729	MDL	10.2	PQL	ng/Kg	J	FD
OCDF	44.4	B	0.0499	MDL	10.2	PQL	ng/Kg	J	FD

Sample ID: SL-819-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.90	JB	0.0501	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.273	JB	0.0164	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0563	JQ	0.0225	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0654	JQ	0.0311	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0807	JBQ	0.0236	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.273	J	0.0346	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.102	JB	0.0226	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.308	J	0.0335	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.303	JB	0.0266	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.135	J	0.0404	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.130	JQ	0.0217	MDL	5.11	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0480	JBQ	0.0240	MDL	5.11	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0924	JQ	0.0207	MDL	5.11	PQL	ng/Kg	J	Z
OCDF	0.852	JB	0.0426	MDL	10.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-819-SA5A-SB-6.5-7.5 *Collected:* 5/30/2013 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.259	JB	0.0335	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.112	JBQ	0.0128	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0565	JQ	0.0203	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0351	J	0.0285	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0810	JB	0.0195	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0908	J	0.0308	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0936	JB	0.0181	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0711	JQ	0.0292	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0567	JB	0.0211	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.135	JQ	0.0389	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.173	J	0.0204	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0760	JBQ	0.0193	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.146	JQ	0.0196	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0435	JQ	0.0376	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0500	JQ	0.0325	MDL	1.09	PQL	ng/Kg	J	Z
OCDD	1.60	JB	0.0380	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.259	JB	0.0462	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.16	JB	0.0285	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.345	JQ	0.0417	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.335	JQ	0.0643	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.273	JBQ	0.0516	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.807	JQ	0.0697	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.229	JBQ	0.0501	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.988	J	0.0679	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.232	JBQ	0.0565	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.305	JQ	0.0499	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.383	JQ	0.0284	MDL	4.98	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.274	JB	0.0491	MDL	4.98	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.273	JQ	0.0257	MDL	4.98	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0601	JQ	0.0373	MDL	0.995	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-833-SA5A-SB-0.0-0.5** ***Collected:*** **5/30/2013 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0775	JQ	0.0518	MDL	0.995	PQL	ng/Kg	J	Z

Sample ID: **SL-833-SA5A-SB-2.5-3.5** ***Collected:*** **5/30/2013 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.108	JBQ	0.0271	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0447	JBQ	0.0109	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0327	JQ	0.0177	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0495	JBQ	0.0185	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0704	JQ	0.0244	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0512	JBQ	0.0173	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.114	J	0.0255	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0742	JBQ	0.0213	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0449	JQ	0.0363	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.103	JQ	0.0199	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0262	JBQ	0.0172	MDL	5.09	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0656	JQ	0.0186	MDL	5.09	PQL	ng/Kg	J	Z
OCDD	0.673	JB	0.0325	MDL	10.2	PQL	ng/Kg	U	B
OCDF	0.123	JB	0.0420	MDL	10.2	PQL	ng/Kg	U	B

Sample ID: **SL-834-SA5A-SB-0.0-0.5** ***Collected:*** **5/30/2013 1:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.03	JB	0.0271	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.329	J	0.0416	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.227	J	0.0605	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.163	JB	0.0430	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.608	J	0.0663	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.155	JBQ	0.0407	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.749	J	0.0625	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.218	JBQ	0.0529	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.104	JQ	0.0507	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.210	J	0.0276	MDL	5.04	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.228	JB	0.0454	MDL	5.04	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.173	J	0.0265	MDL	5.04	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.132	JQ	0.0522	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: SL-834-SA5A-SB-2.4-3.4 *Collected:* 5/30/2013 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.113	JB	0.0249	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0472	JB	0.00924	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0311	J	0.0131	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0316	JBQ	0.0131	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0465	JQ	0.0210	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0195	JBQ	0.0131	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.136	J	0.0211	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0625	JB	0.0147	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0531	JQ	0.0158	MDL	5.17	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0128	JBQ	0.0121	MDL	5.17	PQL	ng/Kg	U	B
OCDD	0.612	JBQ	0.0273	MDL	10.3	PQL	ng/Kg	U	B
OCDF	0.0750	JBQ	0.0327	MDL	10.3	PQL	ng/Kg	U	B

Sample ID: SL-836-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.09	JB	0.0418	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.309	J	0.0600	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.213	J	0.0672	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.297	JB	0.0695	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.656	J	0.0735	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.269	JBQ	0.0680	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.553	JQ	0.0740	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.316	JB	0.0811	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.132	J	0.0403	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.543	J	0.0342	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.257	JBQ	0.0718	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.408	J	0.0321	MDL	5.52	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.113	J	0.0651	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	6.37	JB	0.0428	MDL	11.0	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.137	JB	0.0380	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0926	JB	0.0338	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0627	JBQ	0.0234	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0920	J	0.0341	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0321	JBQ	0.0228	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0783	J	0.0331	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.110	JB	0.0259	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0868	JQ	0.0418	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0877	JQ	0.0189	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0172	JQ	0.0168	MDL	4.96	PQL	ng/Kg	J	Z
OCDD	1.30	JB	0.0449	MDL	9.93	PQL	ng/Kg	U	B
OCDF	0.195	JB	0.0454	MDL	9.93	PQL	ng/Kg	U	B

Sample ID: SL-837-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.29	J	0.0682	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.87	J	0.0723	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.05	JB	0.0722	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.93	J	0.0782	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.20	JB	0.0691	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.91	J	0.0779	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.406	JB	0.0842	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.27	JQ	0.0701	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.953	JQ	0.0546	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.41	JB	0.0700	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.04	J	0.0498	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.142	JQ	0.0379	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.481	J	0.110	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.07	JB	0.0514	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	1.28	JB	0.0219	MDL	5.44	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.200	J	0.0291	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.0963	J	0.0301	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.0520	JBQ	0.0243	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.164	J	0.0332	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.0567	JB	0.0232	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.164	J	0.0311	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.0625	JBQ	0.0249	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0674	JQ	0.0339	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.0494	JQ	0.0163	MDL	5.44	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.0711	JB	0.0228	MDL	5.44	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	5.44	U	0.0151	MDL	5.44	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDD	1.09	U	0.0284	MDL	1.09	PQL	ng/Kg	UJ	FD
OCDD	65.8	B	0.0433	MDL	10.9	PQL	ng/Kg	J	FD
OCDF	5.84	JB	0.0291	MDL	10.9	PQL	ng/Kg	J	Z, FD

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.0	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	7.9	J	4.2	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA5A-SB-6.5-7.5 *Collected:* 5/30/2013 2:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.5	J	2.2	MDL	5.6	PQL	mg/Kg	J	Z
EFH (C30-C40)	4.9	J	4.5	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	4.3	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-833-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 1:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.9	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	4.7	J	4.2	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.8	J	2.1	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	9.7	J	4.1	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-834-SA5A-SB-2.4-3.4 *Collected:* 5/30/2013 1:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.8	J	4.2	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-835-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.6	J	2.2	MDL	5.4	PQL	mg/Kg	J	Z

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.1	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	8.7	J	4.2	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.7	J	2.2	MDL	5.5	PQL	mg/Kg	J	Z, Q
EFH (C30-C40)	10	J	4.4	MDL	11	PQL	mg/Kg	J	Z, Q, Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: AQ**

Sample ID: EB-053013 *Collected:* 5/30/2013 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.077	J	0.051	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.15	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.18	J	0.051	MDL	1.0	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: SL-1237-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.3	MDL	19	PQL	ug/Kg	UJ	FD
CHRYSENE	0.58	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-819-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 2:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.71	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-833-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.73	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.74	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-834-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 1:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.91	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: SL-836-SA5A-SB-0.0-0.5 *Collected:* 5/30/2013 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.94	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.97	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-836-SA5A-SB-2.5-3.5 *Collected:* 5/30/2013 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.73	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.92	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-837-SA5A-SB-4.5-5.5 *Collected:* 5/30/2013 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31		6.6	MDL	20	PQL	ug/Kg	J	Q, Q, FD
CHRYSENE	1.8	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Reason Code Legend

Reason Code	*Description*
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

PH043

Method Blank Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1550B370622	6/7/2013 6:22:00 AM	1,2,3,4,6,7,8-HPCDD	0.337 pg/L	EB-053013
		1,2,3,4,6,7,8-HPCDF	0.359 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.195 pg/L	
		1,2,3,4,7,8-HxCDD	0.226 pg/L	
		1,2,3,4,7,8-HXCDF	0.339 pg/L	
		1,2,3,6,7,8-HXCDD	0.224 pg/L	
		1,2,3,6,7,8-HXCDF	0.205 pg/L	
		1,2,3,7,8,9-HXCDD	0.103 pg/L	
		1,2,3,7,8,9-HXCDF	0.297 pg/L	
		1,2,3,7,8-PECDD	0.271 pg/L	
		1,2,3,7,8-PECDF	0.516 pg/L	
		2,3,4,6,7,8-HXCDF	0.203 pg/L	
		2,3,4,7,8-PECDF	0.268 pg/L	
		2,3,7,8-TCDD	0.133 pg/L	
		OCDD	0.859 pg/L	
		OCDF	0.843 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB-053013(RES)	1,2,3,4,6,7,8-HPCDD	0.331 pg/L	0.331U pg/L
EB-053013(RES)	1,2,3,4,6,7,8-HPCDF	0.388 pg/L	0.388U pg/L
EB-053013(RES)	1,2,3,4,7,8,9-HPCDF	0.204 pg/L	0.204U pg/L
EB-053013(RES)	1,2,3,4,7,8-HxCDD	0.135 pg/L	0.135U pg/L
EB-053013(RES)	1,2,3,4,7,8-HXCDF	0.225 pg/L	0.225U pg/L
EB-053013(RES)	1,2,3,6,7,8-HXCDD	0.147 pg/L	0.147U pg/L
EB-053013(RES)	1,2,3,6,7,8-HXCDF	0.220 pg/L	0.220U pg/L
EB-053013(RES)	1,2,3,7,8,9-HXCDF	0.225 pg/L	0.225U pg/L
EB-053013(RES)	1,2,3,7,8-PECDD	0.174 pg/L	0.174U pg/L
EB-053013(RES)	1,2,3,7,8-PECDF	0.361 pg/L	0.361U pg/L
EB-053013(RES)	2,3,4,6,7,8-HXCDF	0.228 pg/L	0.228U pg/L
EB-053013(RES)	2,3,4,7,8-PECDF	0.219 pg/L	0.219U pg/L
EB-053013(RES)	OCDD	0.810 pg/L	0.810U pg/L
EB-053013(RES)	OCDF	0.664 pg/L	0.664U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1540B371936	6/4/2013 7:36:00 PM	1,2,3,4,6,7,8-HPCDD	0.0620 ng/Kg	SL-1237-SA5A-SB-4.5-5.5
		1,2,3,4,6,7,8-HPCDF	0.0289 ng/Kg	SL-819-SA5A-SB-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0303 ng/Kg	SL-819-SA5A-SB-6.5-7.5
		1,2,3,6,7,8-HXCDF	0.0202 ng/Kg	SL-833-SA5A-SB-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0236 ng/Kg	SL-833-SA5A-SB-2.5-3.5
		2,3,4,6,7,8-HXCDF	0.0317 ng/Kg	SL-834-SA5A-SB-0.0-0.5
		OCDD	0.267 ng/Kg	SL-834-SA5A-SB-2.4-3.4
		OCDF	0.0812 ng/Kg	SL-836-SA5A-SB-0.0-0.5
				SL-836-SA5A-SB-2.5-3.5
				SL-837-SA5A-SB-0.0-0.5
				SL-837-SA5A-SB-4.5-5.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-819-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0807 ng/Kg	0.0807U ng/Kg
SL-819-SA5A-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0480 ng/Kg	0.0480U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	1,2,3,4,6,7,8-HPCDD	0.259 ng/Kg	0.259U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	1,2,3,4,6,7,8-HPCDF	0.112 ng/Kg	0.112U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	1,2,3,4,7,8-HXCDF	0.0810 ng/Kg	0.0810U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	1,2,3,6,7,8-HXCDF	0.0936 ng/Kg	0.0936U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	1,2,3,7,8,9-HXCDF	0.0567 ng/Kg	0.0567U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	2,3,4,6,7,8-HXCDF	0.0760 ng/Kg	0.0760U ng/Kg
SL-819-SA5A-SB-6.5-7.5(RES)	OCDF	0.259 ng/Kg	0.259U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.108 ng/Kg	0.108U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0447 ng/Kg	0.0447U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0495 ng/Kg	0.0495U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0512 ng/Kg	0.0512U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0742 ng/Kg	0.0742U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0262 ng/Kg	0.0262U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	OCDD	0.673 ng/Kg	0.673U ng/Kg
SL-833-SA5A-SB-2.5-3.5(RES)	OCDF	0.123 ng/Kg	0.123U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	1,2,3,4,6,7,8-HPCDD	0.113 ng/Kg	0.113U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	1,2,3,4,6,7,8-HPCDF	0.0472 ng/Kg	0.0472U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	1,2,3,4,7,8-HXCDF	0.0316 ng/Kg	0.0316U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	1,2,3,6,7,8-HXCDF	0.0195 ng/Kg	0.0195U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	1,2,3,7,8,9-HXCDF	0.0625 ng/Kg	0.0625U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	2,3,4,6,7,8-HXCDF	0.0128 ng/Kg	0.0128U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	OCDD	0.612 ng/Kg	0.612U ng/Kg
SL-834-SA5A-SB-2.4-3.4(RES)	OCDF	0.0750 ng/Kg	0.0750U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-836-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.137 ng/Kg	0.137U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0926 ng/Kg	0.0926U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0627 ng/Kg	0.0627U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0321 ng/Kg	0.0321U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.110 ng/Kg	0.110U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	OCDD	1.30 ng/Kg	1.30U ng/Kg
SL-836-SA5A-SB-2.5-3.5(RES)	OCDF	0.195 ng/Kg	0.195U ng/Kg
SL-837-SA5A-SB-4.5-5.5(RES)	1,2,3,4,7,8-HXCDF	0.0520 ng/Kg	0.0520U ng/Kg
SL-837-SA5A-SB-4.5-5.5(RES)	1,2,3,6,7,8-HXCDF	0.0567 ng/Kg	0.0567U ng/Kg
SL-837-SA5A-SB-4.5-5.5(RES)	1,2,3,7,8,9-HXCDF	0.0625 ng/Kg	0.0625U ng/Kg
SL-837-SA5A-SB-4.5-5.5(RES)	2,3,4,6,7,8-HXCDF	0.0711 ng/Kg	0.0711U ng/Kg

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15635AB221848	6/6/2013 6:48:00 PM	ANTIMONY	0.0037 mg/L	EB-053013
		CALCIUM	0.0711 mg/L	

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15637AB221052	6/6/2013 10:52:00 AM	ANTIMONY	0.524 mg/Kg	SL-1237-SA5A-SB-4.5-5.5
		CALCIUM	10.9 mg/Kg	SL-819-SA5A-SB-0.0-0.5
		PHOSPHORUS	1.47 mg/Kg	SL-819-SA5A-SB-6.5-7.5
		TIN	1.50 mg/Kg	SL-833-SA5A-SB-0.0-0.5
				SL-833-SA5A-SB-2.5-3.5
				SL-834-SA5A-SB-0.0-0.5
				SL-834-SA5A-SB-2.4-3.4
				SL-836-SA5A-SB-0.0-0.5
				SL-836-SA5A-SB-2.5-3.5
				SL-837-SA5A-SB-0.0-0.5
				SL-837-SA5A-SB-4.5-5.5

Method Blank Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-1237-SA5A-SB-4.5-5.5(REA/TOT)	ANTIMONY	0.517 mg/Kg	0.517U mg/Kg
SL-1237-SA5A-SB-4.5-5.5(REA/TOT)	TIN	3.51 mg/Kg	3.51U mg/Kg
SL-819-SA5A-SB-0.0-0.5(REA/TOT)	ANTIMONY	0.704 mg/Kg	0.704U mg/Kg
SL-819-SA5A-SB-0.0-0.5(REA/TOT)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-819-SA5A-SB-6.5-7.5(REA/TOT)	ANTIMONY	1.24 mg/Kg	1.24U mg/Kg
SL-819-SA5A-SB-6.5-7.5(REA/TOT)	TIN	3.86 mg/Kg	3.86U mg/Kg
SL-833-SA5A-SB-0.0-0.5(REA/TOT)	ANTIMONY	0.565 mg/Kg	0.565U mg/Kg
SL-833-SA5A-SB-0.0-0.5(REA/TOT)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-834-SA5A-SB-0.0-0.5(REA/TOT)	ANTIMONY	0.563 mg/Kg	0.563U mg/Kg
SL-834-SA5A-SB-0.0-0.5(REA/TOT)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-834-SA5A-SB-2.4-3.4(REA/TOT)	ANTIMONY	0.954 mg/Kg	0.954U mg/Kg
SL-834-SA5A-SB-2.4-3.4(REA/TOT)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-836-SA5A-SB-0.0-0.5(REA/TOT)	ANTIMONY	0.734 mg/Kg	0.734U mg/Kg
SL-836-SA5A-SB-0.0-0.5(REA/TOT)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-836-SA5A-SB-2.5-3.5(REA/TOT)	ANTIMONY	0.881 mg/Kg	0.881U mg/Kg
SL-836-SA5A-SB-2.5-3.5(REA/TOT)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-837-SA5A-SB-0.0-0.5(REA/TOT)	ANTIMONY	0.727 mg/Kg	0.727U mg/Kg
SL-837-SA5A-SB-0.0-0.5(REA/TOT)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-837-SA5A-SB-4.5-5.5(REA/TOT)	ANTIMONY	1.22 mg/Kg	1.22U mg/Kg
SL-837-SA5A-SB-4.5-5.5(REA/TOT)	TIN	3.92 mg/Kg	3.92U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15637AB220623A	6/11/2013 6:23:00 AM	STRONTIUM	0.0562 mg/Kg	SL-1237-SA5A-SB-4.5-5.5 SL-819-SA5A-SB-0.0-0.5 SL-819-SA5A-SB-6.5-7.5 SL-833-SA5A-SB-0.0-0.5 SL-833-SA5A-SB-2.5-3.5 SL-834-SA5A-SB-0.0-0.5 SL-834-SA5A-SB-2.4-3.4 SL-836-SA5A-SB-0.0-0.5 SL-836-SA5A-SB-2.5-3.5 SL-837-SA5A-SB-0.0-0.5 SL-837-SA5A-SB-4.5-5.5

Method Blank Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6020A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: **8270D SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC15B261512	6/10/2013 3:12:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.17 ug/L	EB-053013

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB-053013(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.077 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH043

Laboratory: LL

EDD Filename: PrepPH043_v1

eQAPP Name: CDM_SSFL_130705_Lan

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-837-SA5A-SB-4.5-5.5MS SL-837-SA5A-SB-4.5-5.5MSD (SL-837-SA5A-SB-4.5-5.5)	EFH (C15-C20)	157	-	49.00-123.00	25 (20.00)	EFH (C15-C20)	J (all detects)
	EFH (C21-C30)	-	-	49.00-123.00	29 (20.00)	EFH (C21-C30)	
	EFH (C8-C11)	-	221	49.00-123.00	99 (20.00)	EFH (C8-C11)	
SL-837-SA5A-SB-4.5-5.5MSD (SL-837-SA5A-SB-4.5-5.5)	EFH (C30-C40)	-	6	49.00-123.00	21 (20.00)	EFH (C30-C40)	J(all detects) UJ(all non-detects)

Method: 8270D SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-837-SA5A-SB-4.5-5.5MSD (SL-837-SA5A-SB-4.5-5.5)	Diethylphthalate	-	166	76.00-127.00	65 (30.00)	Diethylphthalate	J(all detects)
	Di-n-octylphthalate	-	-	52.00-162.00	41 (30.00)	Di-n-octylphthalate	
SL-837-SA5A-SB-4.5-5.5MS SL-837-SA5A-SB-4.5-5.5MSD (SL-837-SA5A-SB-4.5-5.5)	BIS(2-ETHYLHEXYL)PHTHALAT	-5	14	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects) R(all non-detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-837-SA5A-SB-4.5-5.5MS (TOT) SL-837-SA5A-SB-4.5-5.5MSD (TOT) (SL-1237-SA5A-SB-4.5-5.5 SL-819-SA5A-SB-0.0-0.5 SL-819-SA5A-SB-6.5-7.5 SL-833-SA5A-SB-0.0-0.5 SL-833-SA5A-SB-2.5-3.5 SL-834-SA5A-SB-0.0-0.5 SL-834-SA5A-SB-2.4-3.4 SL-836-SA5A-SB-0.0-0.5 SL-836-SA5A-SB-2.5-3.5 SL-837-SA5A-SB-0.0-0.5 SL-837-SA5A-SB-4.5-5.5)	ALUMINUM	2206	2079	75.00-125.00	-	ALUMINUM	Al, Ca, Ti, No Qual, >4x J(all detects)
	CALCIUM	-	133	75.00-125.00	-	CALCIUM	
	POTASSIUM	162	161	75.00-125.00	-	POTASSIUM	
	TITANIUM	361	342	75.00-125.00	-	TITANIUM	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-837-SA5A-SB-4.5-5.5MS (TOT)	IRON	-2572	544	75.00-125.00	-	IRON	
SL-837-SA5A-SB-4.5-5.5MSD (TOT)	MAGNESIUM	-74	161	75.00-125.00	-	MAGNESIUM	
(SL-1237-SA5A-SB-4.5-5.5	MANGANESE	-233	-155	75.00-125.00	-	MANGANESE	
SL-819-SA5A-SB-0.0-0.5							
SL-819-SA5A-SB-6.5-7.5							
SL-833-SA5A-SB-0.0-0.5							No Qual, >4x
SL-833-SA5A-SB-2.5-3.5							
SL-834-SA5A-SB-0.0-0.5							
SL-834-SA5A-SB-2.4-3.4							
SL-836-SA5A-SB-0.0-0.5							
SL-836-SA5A-SB-2.5-3.5							
SL-837-SA5A-SB-0.0-0.5							
SL-837-SA5A-SB-4.5-5.5)							
SL-837-SA5A-SB-4.5-5.5MS (TOT)	ANTIMONY	63	62	75.00-125.00	-	ANTIMONY	
SL-837-SA5A-SB-4.5-5.5MSD (TOT)	PHOSPHORUS	63	-	75.00-125.00	-	PHOSPHORUS	
(SL-1237-SA5A-SB-4.5-5.5							
SL-819-SA5A-SB-0.0-0.5							
SL-819-SA5A-SB-6.5-7.5							
SL-833-SA5A-SB-0.0-0.5							J(all detects)
SL-833-SA5A-SB-2.5-3.5							UJ(all non-detects)
SL-834-SA5A-SB-0.0-0.5							
SL-834-SA5A-SB-2.4-3.4							
SL-836-SA5A-SB-0.0-0.5							
SL-836-SA5A-SB-2.5-3.5							P,
SL-837-SA5A-SB-0.0-0.5							No Qual, >4x
SL-837-SA5A-SB-4.5-5.5)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-837-SA5A-SB-4.5-5.5DUP (TOT)	ANTIMONY	29	20.00	
(SL-1237-SA5A-SB-4.5-5.5	ARSENIC	34	20.00	
SL-819-SA5A-SB-0.0-0.5	CADMIUM	64	20.00	
SL-819-SA5A-SB-6.5-7.5	COBALT	44	20.00	J (all detects)
SL-833-SA5A-SB-0.0-0.5	MANGANESE	32	20.00	UJ (all non-detects)
SL-833-SA5A-SB-2.5-3.5	MOLYBDENUM	22	20.00	
SL-834-SA5A-SB-0.0-0.5				
SL-834-SA5A-SB-2.4-3.4				
SL-836-SA5A-SB-0.0-0.5				Sb, As, Cd, Mo, No Qual, OK by Difference
SL-836-SA5A-SB-2.5-3.5				
SL-837-SA5A-SB-0.0-0.5				
SL-837-SA5A-SB-4.5-5.5)				

Field Duplicate RPD Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-837-SA5A-SB-4.5-5.5	SL-1237-SA5A-SB-4.5-5.5			
MOISTURE	8.4	5.3	45		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-837-SA5A-SB-4.5-5.5	SL-1237-SA5A-SB-4.5-5.5			
1,2,3,4,6,7,8-HPCDD	5.07	42.3	157	50.00	
1,2,3,4,6,7,8-HPCDF	1.28	11.1	159	50.00	
1,2,3,4,7,8,9-HPCDF	0.200	1.08	138	50.00	
1,2,3,4,7,8-HxCDD	0.0963	0.625	147	50.00	
1,2,3,4,7,8-HXCDF	0.0520	0.342	147	50.00	
1,2,3,6,7,8-HXCDD	0.164	1.27	154	50.00	
1,2,3,6,7,8-HXCDF	0.0567	0.560	163	50.00	
1,2,3,7,8,9-HXCDD	0.164	1.59	163	50.00	J(all detects) UJ(all non-detects)
1,2,3,7,8,9-HXCDF	0.0625	0.143	78	50.00	
1,2,3,7,8-PECDD	0.0674	0.390	141	50.00	
1,2,3,7,8-PECDF	0.0494	0.261	136	50.00	
2,3,4,6,7,8-HXCDF	0.0711	0.529	153	50.00	
2,3,4,7,8-PECDF	5.44 U	0.171	200	50.00	
2,3,7,8-TCDD	1.09 U	0.0465	200	50.00	
OCDD	65.8	472	151	50.00	
OCDF	5.84	44.4	154	50.00	

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-837-SA5A-SB-4.5-5.5 (TOT)	SL-1237-SA5A-SB-4.5-5.5 (TOT)			
ALUMINUM	33700	23500	36	50.00	
IRON	43000	25900	50	50.00	
LITHIUM	61.0	41.0	39	50.00	
MOLYBDENUM	0.722	0.770	6	50.00	
PHOSPHORUS	464	323	36	50.00	
POTASSIUM	2000	1930	4	50.00	No Qualifiers Applied
SODIUM	190	123	43	50.00	
TIN	3.92	3.51	11	50.00	
TITANIUM	1460	1240	16	50.00	
ZINC	80.6	52.7	42	50.00	
Zirconium	6.90	5.05	31	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Field Duplicate RPD Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

ANTIMONY	1.22	0.517	81	50.00	J(all detects) UJ(all non-detects)
ARSENIC	3.74	7.84	71	50.00	
BARIUM	171	102	51	50.00	
BERYLLIUM	1.66	0.884	61	50.00	
BORON	10.6 U	1.63	200	50.00	
CADMIUM	0.0392	0.187	131	50.00	
CALCIUM	5340	2710	65	50.00	
CHROMIUM	51.2	23.5	74	50.00	
COBALT	13.1	6.77	64	50.00	
COPPER	28.7	10.6	92	50.00	
LEAD	18.6	8.69	73	50.00	
MAGNESIUM	10000	4930	68	50.00	
MANGANESE	518	299	54	50.00	
NICKEL	27.0	13.5	67	50.00	
VANADIUM	82.3	47.2	54	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-837-SA5A-SB-4.5-5.5 (TOT)	Concentration (mg/Kg) SL-1237-SA5A-SB-4.5-5.5 (TOT)	Sample RPD	eQAPP RPD	Flag
SELENIUM	0.149	0.126	17	50.00	
SILVER	0.0457	0.0464	2	50.00	No Qualifiers Applied
THALLIUM	0.309	0.274	12	50.00	
STRONTIUM	45.7	23.4	65	50.00	J(all detects)

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-837-SA5A-SB-4.5-5.5 (TOT)	Concentration (mg/Kg) SL-1237-SA5A-SB-4.5-5.5 (TOT)	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0153	0.0112	31	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-837-SA5A-SB-4.5-5.5	Concentration (mg/Kg) SL-1237-SA5A-SB-4.5-5.5	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	3.7	3.0	21	50.00	No Qualifiers Applied
EFH (C30-C40)	10	7.9	23	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Field Duplicate RPD Report

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8270D SIM
Matrix: SO

Analyte	*Concentration (ug/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-837-SA5A-SB-4.5-5.5	SL-1237-SA5A-SB-4.5-5.5			
BIS(2-ETHYLHEXYL)PHTHALATE	31	19 U	200	50.00	J(all detects)
CHRYSENE	1.8 U	0.58	200	50.00	UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-837-SA5A-SB-4.5-5.5	SL-1237-SA5A-SB-4.5-5.5			
PH	6.83	6.93	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-053013	1,2,3,4,6,7,8-HPCDD	JBQ	0.331	10.9	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	0.388	10.9	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.204	10.9	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	10.9	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.225	10.9	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.147	10.9	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.220	10.9	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.225	10.9	PQL	pg/L	
	1,2,3,7,8-PECDD	JB	0.174	10.9	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.361	10.9	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.228	10.9	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.219	10.9	PQL	pg/L	
	OCDD	JBQ	0.810	21.8	PQL	pg/L	
	OCDF	JBQ	0.664	21.8	PQL	pg/L	

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-053013	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.077	1.0	PQL	ug/L	
	Diethylphthalate	J	0.15	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.18	1.0	PQL	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	1,2,3,4,7,8,9-HPCDF	J	1.08	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.625	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.342	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	1.27	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.560	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	1.59	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.143	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.390	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.261	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.529	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.171	5.08	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0465	1.02	PQL	ng/Kg	
SL-819-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.90	5.11	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.273	5.11	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.0563	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0654	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0807	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.273	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.102	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.308	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.303	5.11	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.135	5.11	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.130	5.11	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0480	5.11	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0924	5.11	PQL	ng/Kg	
	OCDF	JB	0.852	10.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-819-SA5A-SB-6.5-7.5	1,2,3,4,6,7,8-HPCDD	JB	0.259	5.46	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.112	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.0565	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0351	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0810	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.0908	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0936	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.0711	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0567	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JQ	0.135	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.173	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0760	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.146	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0435	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0500	1.09	PQL	ng/Kg	
	OCDD	JB	1.60	10.9	PQL	ng/Kg	
	OCDF	JB	0.259	10.9	PQL	ng/Kg	
SL-833-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.16	4.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.345	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.335	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.273	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.807	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.229	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.988	4.98	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.232	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.305	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.383	4.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.274	4.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.273	4.98	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0601	0.995	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0775	0.995	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-833-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.108	5.09	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0447	5.09	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JQ	0.0327	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0495	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0704	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0512	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.114	5.09	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0742	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0449	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.103	5.09	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0262	5.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0656	5.09	PQL	ng/Kg	
	OCDD	JB	0.673	10.2	PQL	ng/Kg	
	OCDF	JB	0.123	10.2	PQL	ng/Kg	
SL-834-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.03	5.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.329	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.227	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.163	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.608	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.155	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.749	5.04	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.218	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.104	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.210	5.04	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.228	5.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.173	5.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.132	1.01	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-834-SA5A-SB-2.4-3.4	1,2,3,4,6,7,8-HPCDD	JB	0.113	5.17	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0472	5.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.0311	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0316	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.0465	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0195	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.136	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0625	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0531	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0128	5.17	PQL	ng/Kg	
	OCDD	JBQ	0.612	10.3	PQL	ng/Kg	
	OCDF	JBQ	0.0750	10.3	PQL	ng/Kg	
SL-836-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.09	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.309	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.213	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.297	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.656	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.269	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.553	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.316	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.132	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.543	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.257	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	0.408	5.52	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.113	1.10	PQL	ng/Kg	
	OCDF	JB	6.37	11.0	PQL	ng/Kg	
SL-836-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.137	4.96	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0926	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0627	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.0920	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0321	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.0783	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.110	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0868	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0877	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.0172	4.96	PQL	ng/Kg	
	OCDD	JB	1.30	9.93	PQL	ng/Kg	
	OCDF	JB	0.195	9.93	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-837-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	2.29	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.87	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.05	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	3.93	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.20	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	4.91	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.406	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JQ	1.27	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.953	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.41	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	J	1.04	5.07	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.142	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.481	1.01	PQL	ng/Kg	
SL-837-SA5A-SB-4.5-5.5	1,2,3,4,6,7,8-HPCDD	JB	5.07	5.44	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.28	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	J	0.200	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0963	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0520	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.164	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0567	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.164	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0625	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0674	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0494	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0711	5.44	PQL	ng/Kg	
	OCDF	JB	5.84	10.9	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	ANTIMONY	J	0.517	4.10	PQL	mg/Kg	
	BERYLLIUM	J	0.884	1.03	PQL	mg/Kg	
	BORON	J	1.63	10.3	PQL	mg/Kg	
	CADMIUM	J	0.187	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.770	2.05	PQL	mg/Kg	
	TIN	J	3.51	10.3	PQL	mg/Kg	
	Zirconium	J	5.05	5.13	PQL	mg/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-819-SA5A-SB-0.0-0.5	ANTIMONY	J	0.704	4.02	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.685	1.01	PQL	mg/Kg	
	BORON	J	2.86	10.1	PQL	mg/Kg	
	CADMIUM	J	0.419	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.543	2.01	PQL	mg/Kg	
	SODIUM	J	94.6	101	PQL	mg/Kg	
	TIN	J	2.90	10.1	PQL	mg/Kg	
	Zirconium	J	4.18	5.03	PQL	mg/Kg	
SL-819-SA5A-SB-6.5-7.5	ANTIMONY	J	1.24	4.38	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0427	1.10	PQL	mg/Kg	
	MOLYBDENUM	J	1.32	2.19	PQL	mg/Kg	
	TIN	J	3.86	11.0	PQL	mg/Kg	
SL-833-SA5A-SB-0.0-0.5	ANTIMONY	J	0.565	3.96	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.516	0.990	PQL	mg/Kg	
	BORON	J	2.49	9.90	PQL	mg/Kg	
	CADMIUM	J	0.269	0.990	PQL	mg/Kg	
	MOLYBDENUM	J	0.402	1.98	PQL	mg/Kg	
	SODIUM	J	69.4	99.0	PQL	mg/Kg	
	TIN	J	2.65	9.90	PQL	mg/Kg	
	Zirconium	J	3.36	4.95	PQL	mg/Kg	
SL-833-SA5A-SB-2.5-3.5	ARSENIC	J	3.53	4.13	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.673	1.03	PQL	mg/Kg	
	BORON	J	1.66	10.3	PQL	mg/Kg	
	SODIUM	J	84.3	103	PQL	mg/Kg	
	TIN	J	8.14	10.3	PQL	mg/Kg	
	Zirconium	J	4.10	5.16	PQL	mg/Kg	
SL-834-SA5A-SB-0.0-0.5	ANTIMONY	J	0.563	4.07	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.545	1.02	PQL	mg/Kg	
	BORON	J	2.52	10.2	PQL	mg/Kg	
	CADMIUM	J	0.307	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.413	2.03	PQL	mg/Kg	
	SODIUM	J	74.5	102	PQL	mg/Kg	
	TIN	J	2.64	10.2	PQL	mg/Kg	
	Zirconium	J	3.52	5.08	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-834-SA5A-SB-2.4-3.4	ANTIMONY	J	0.954	4.13	PQL	mg/Kg	
	BERYLLIUM	J	0.781	1.03	PQL	mg/Kg	
	BORON	J	2.18	10.3	PQL	mg/Kg	
	CADMIUM	J	0.207	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.562	2.07	PQL	mg/Kg	
	SODIUM	J	88.5	103	PQL	mg/Kg	
	TIN	J	2.94	10.3	PQL	mg/Kg	
	Zirconium	J	4.74	5.17	PQL	mg/Kg	
SL-836-SA5A-SB-0.0-0.5	ANTIMONY	J	0.734	4.46	PQL	mg/Kg	
	BERYLLIUM	J	0.548	1.11	PQL	mg/Kg	
	BORON	J	2.89	11.1	PQL	mg/Kg	
	CADMIUM	J	0.332	1.11	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.480	2.23	PQL	mg/Kg	
	SODIUM	J	80.8	111	PQL	mg/Kg	
	TIN	J	2.88	11.1	PQL	mg/Kg	
	Zirconium	J	4.08	5.57	PQL	mg/Kg	
SL-836-SA5A-SB-2.5-3.5	ANTIMONY	J	0.881	4.12	PQL	mg/Kg	
	BERYLLIUM	J	0.753	1.03	PQL	mg/Kg	
	BORON	J	2.20	10.3	PQL	mg/Kg	
	CADMIUM	J	0.278	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.516	2.06	PQL	mg/Kg	
	SODIUM	J	89.2	103	PQL	mg/Kg	
	TIN	J	3.06	10.3	PQL	mg/Kg	
	Zirconium	J	4.60	5.15	PQL	mg/Kg	
SL-837-SA5A-SB-0.0-0.5	ANTIMONY	J	0.727	4.11	PQL	mg/Kg	
	BERYLLIUM	J	0.575	1.03	PQL	mg/Kg	
	BORON	J	2.88	10.3	PQL	mg/Kg	
	CADMIUM	J	0.394	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.454	2.06	PQL	mg/Kg	
	SODIUM	J	77.9	103	PQL	mg/Kg	
	TIN	J	2.98	10.3	PQL	mg/Kg	
	Zirconium	J	3.21	5.14	PQL	mg/Kg	
SL-837-SA5A-SB-4.5-5.5	ANTIMONY	J	1.22	4.24	PQL	mg/Kg	
	ARSENIC	J	3.74	4.24	PQL	mg/Kg	
	CADMIUM	J	0.0392	1.06	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.722	2.12	PQL	mg/Kg	
	TIN	J	3.92	10.6	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	SELENIUM	J	0.126	0.410	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0464	0.205	PQL	mg/Kg	
SL-819-SA5A-SB-0.0-0.5	SELENIUM	J	0.176	0.402	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0589	0.201	PQL	mg/Kg	
SL-819-SA5A-SB-6.5-7.5	SELENIUM	J	0.225	0.438	PQL	mg/Kg	J (all detects)
	SILVER	J	0.174	0.219	PQL	mg/Kg	
SL-833-SA5A-SB-0.0-0.5	SELENIUM	J	0.0998	0.396	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0443	0.198	PQL	mg/Kg	
SL-833-SA5A-SB-2.5-3.5	SELENIUM	J	0.127	0.413	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0338	0.206	PQL	mg/Kg	
SL-834-SA5A-SB-0.0-0.5	SELENIUM	J	0.150	0.407	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0456	0.203	PQL	mg/Kg	
SL-834-SA5A-SB-2.4-3.4	SELENIUM	J	0.110	0.413	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0541	0.207	PQL	mg/Kg	
SL-836-SA5A-SB-0.0-0.5	SELENIUM	J	0.146	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0354	0.223	PQL	mg/Kg	
SL-836-SA5A-SB-2.5-3.5	SELENIUM	J	0.151	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0475	0.206	PQL	mg/Kg	
SL-837-SA5A-SB-0.0-0.5	SELENIUM	J	0.131	0.411	PQL	mg/Kg	J (all detects)
	SILVER	J	0.158	0.206	PQL	mg/Kg	
SL-837-SA5A-SB-4.5-5.5	SELENIUM	J	0.149	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0457	0.212	PQL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	MERCURY	J	0.0112	0.0173	PQL	mg/Kg	J (all detects)
SL-837-SA5A-SB-0.0-0.5	MERCURY	J	0.0150	0.0172	PQL	mg/Kg	J (all detects)
SL-837-SA5A-SB-4.5-5.5	MERCURY	J	0.0153	0.0178	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	EFH (C21-C30)	J	3.0	5.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	7.9	11	PQL	mg/Kg	
SL-819-SA5A-SB-6.5-7.5	EFH (C21-C30)	J	2.5	5.6	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	4.9	11	PQL	mg/Kg	
SL-833-SA5A-SB-0.0-0.5	EFH (C21-C30)	J	4.3	5.1	PQL	mg/Kg	J (all detects)
SL-833-SA5A-SB-2.5-3.5	EFH (C21-C30)	J	2.9	5.2	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	4.7	10	PQL	mg/Kg	
SL-834-SA5A-SB-0.0-0.5	EFH (C21-C30)	J	3.8	5.1	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	9.7	10	PQL	mg/Kg	
SL-834-SA5A-SB-2.4-3.4	EFH (C30-C40)	J	4.8	10	PQL	mg/Kg	J (all detects)
SL-835-SA5A-SB-0.0-0.5	EFH (C15-C20)	J	4.6	5.4	PQL	mg/Kg	J (all detects)
SL-836-SA5A-SB-2.5-3.5	EFH (C21-C30)	J	3.1	5.2	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.7	10	PQL	mg/Kg	
SL-837-SA5A-SB-4.5-5.5	EFH (C21-C30)	J	3.7	5.5	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	10	11	PQL	mg/Kg	

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1237-SA5A-SB-4.5-5.5	CHRYSENE	J	0.58	1.8	PQL	ug/Kg	J (all detects)
SL-819-SA5A-SB-0.0-0.5	CHRYSENE	J	0.71	1.7	PQL	ug/Kg	J (all detects)
SL-833-SA5A-SB-0.0-0.5	BENZO(A)PYRENE	J	0.73	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.74	1.7	PQL	ug/Kg	
	PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-834-SA5A-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.76	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.91	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH043 **Laboratory: LL**

EDD Filename: PrepPH043_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **8270D SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-836-SA5A-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	0.97	1.9	PQL	ug/Kg	
SL-836-SA5A-SB-2.5-3.5	BENZO(A)ANTHRACENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.73	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.92	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.88	1.7	PQL	ug/Kg	

LDC #: 30037C4

SDG #: PH043

Laboratory: Eurofins Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/25/13

Page: 1 of 1

Reviewer: CR

2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	—	Sampling dates: 5/30/13
II.	ICP/MS Tune	—	
III.	Calibration		
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	(5,6)
XV	Field Blanks	SW	*EB=1 FB=FB041113 ~~EB-053013 041042~~ (PHG29)

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; *ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil/water

1	EB-053013 W	11	SL-834-SA5A-SB-0.0-0.5	21		31	
2	SL-836-SA5A-SB-0.0-0.5	12	SL-834-SA5A-SB-2.4-3.4	22		32	
3	SL-836-SA5A-SB-2.5-3.5	13	SL-837-SA5A-SB-4.5-5.5MS	23		33	
4	SL-837-SA5A-SB-0.0-0.5	14	SL-837-SA5A-SB-4.5-5.5MSD	24		34	
5	SL-837-SA5A-SB-4.5-5.5	15	SL-837-SA5A-SB-4.5-5.5DUP	25		35	
6	SL-1237-SA5A-SB-4.5-5.5	16		26		36	
7	SL-819-SA5A-SB-0.0-0.5	17		27		37	
8	SL-819-SA5A-SB-6.5-7.5	18		28		38	
9	SL-833-SA5A-SB-0.0-0.5	19		29		39	
10	SL-833-SA5A-SB-2.5-3.5	20		30		40	

Notes: _____

LDC #: 30037C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	2	3	4	5	6	7	8	9	11	12		
Sb			4.7	2.35	0.73	0.88	0.73	1.2	0.52	0.70	1.2	0.57	0.56	0.95		

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 30037C4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CL
2nd Reviewer: MC

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg Reason: F
Sampling date: 4/11/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	FB-041113 (SDG: PH029)	Action Limit	2	3	4	5	6	7	8	9	11	12	
Cu	0.0036	1.8											
Mo	0.0036	1.8	0.48	0.52	0.45	0.72	0.77	0.54	1.3	0.40	0.41	0.56	

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

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[redacted] UJ/UJ ↑J (detects)

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: PH043
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7076735BKG Matrix Spike Lab Sample ID: 7076736MS Matrix Spike Duplicate Lab Sample ID: 7076737MSD
Batch Id(s): P15637A, P15638B

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Aluminum		30868.6544		35152.8476		34905.6495		194.1748	194.1748	MG/KG	2206		2079	*	1			20	P
Antimony		1.1175	B	31.7155		31.0437		48.5437	48.5437	MG/KG	63	N	62	N	2		75 - 125	20	P
Arsenic		3.4301	B	18.8233		17.7951		14.5631	14.5631	MG/KG	106		99		6		75 - 125	20	P
Barium		156.8621		341.9126		344.1369		194.1748	194.1748	MG/KG	95		96		1		75 - 125	20	P
Beryllium		1.5165		6.4680		6.4757		4.8544	4.8544	MG/KG	102		102		0		75 - 125	20	P
Boron		0.8058	U	189.1505		184.1311		194.1748	194.1748	MG/KG	97		95		3		75 - 125	20	P
Cadmium		0.0359	B	4.6330		4.5417		4.8544	4.8544	MG/KG	95		93		2		75 - 125	20	P
Calcium		4887.2660		5188.7835		5402.4107		388.3495	388.3495	MG/KG	78		133		4			20	P
Chromium		46.8796		66.6553		68.7437		19.4175	19.4175	MG/KG	102		113		3		75 - 125	20	P
Cobalt		11.9825		53.3126		54.1117		48.5437	48.5437	MG/KG	85		87		1		75 - 125	20	P
Copper		26.2893		49.9456		51.6796		24.2718	24.2718	MG/KG	97		105		3		75 - 125	20	P
Iron		39383.1942		36886.1262		39911.0437		97.0874	97.0874	MG/KG	-2572	*	544		8			20	P
Lead		17.0369		27.9058		29.1913		14.5631	14.5631	MG/KG	75		83		5		75 - 125	20	P
Lithium		55.8631		157.6049		157.3291		97.0874	97.0874	MG/KG	105		105		0		75 - 125	20	P
Magnesium		9191.6777		9047.3068		9503.5544		194.1748	194.1748	MG/KG	-74		161		5			20	P
Manganese		474.9427		362.0078		399.8204		48.5437	48.5437	MG/KG	-238		156		10			20	P
Mercury		0.0140	B	0.1718		0.1741		0.1599	0.1604	MG/KG	99		100		1		65 - 135	20	CV
Molybdenum		0.6612	B	185.8291		184.3563		194.1748	194.1748	MG/KG	95		95		1		75 - 125	20	P
Nickel		24.7476		68.7767		70.1456		48.5437	48.5437	MG/KG	91		94		2		75 - 125	20	P
Phosphorus		424.9631		486.1175		504.9184		97.0874	97.0874	MG/KG	63		82		4			20	P
Potassium		1830.9252		3400.9019		3395.9699		970.8738	970.8738	MG/KG	162	N	161	N	0		75 - 125	20	P
Selenium	78	0.1362	B	2.2175		2.1146		1.9417	1.9417	MG/KG	107		102		5		75 - 125	20	MS
Silver	107	0.0418	B	11.1087		11.1786		9.7087	9.7087	MG/KG	114		115		1		75 - 125	20	MS
Sodium		173.9408		1135.6534		1132.9495		970.8738	970.8738	MG/KG	99		99		0		75 - 125	20	P
Strontium	88	41.8252		50.0194		51.0097		7.7670	7.7670	MG/KG	106		118		2			20	MS
Thallium	203	0.2835		0.7010		0.6893		0.3883	0.3883	MG/KG	108		105		2		75 - 125	20	MS
Tin		3.5951	B	349.8359		347.4010		388.3495	388.3495	MG/KG	89		89		1		75 - 125	20	P
Titanium		1337.0427		1687.9903		1669.1184		97.0874	97.0874	MG/KG	361	*	3342		1			20	P
Vanadium		75.3971		123.5903		128.1146		48.5437	48.5437	MG/KG	99		109		4		75 - 125	20	P
Zinc		73.8718		120.2437		123.8864		48.5437	48.5437	MG/KG	96		103		3		75 - 125	20	P
Zirconium		6.3223		102.2398		101.6864		97.0874	97.0874	MG/KG	99		98		1		75 - 125	20	P

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: PH043
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7076735BKG
Duplicate Lab Sample ID: 7076738DUP
Batch ID(s): P15637A, P15638B
Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			30868.6544		29968.6165		3		P
Antimony			1.1175	B	1.5029	B	29		P
Arsenic		3.9	3.4301	B	4.8505		34		P
Barium			156.8621		140.6058		11		P
Beryllium		1.0	1.5165		1.4291		6		P
Boron			-1.9845	B	-1.2971	B	-42		P
Cadmium			0.0359	B	0.0699	B	64		P
Calcium			4887.2660		4565.5010		7		P
Chromium			46.8796		45.0447		4		P
Cobalt			11.9825		7.6748		44	*	P
Copper			26.2893		22.8854		14		P
Iron			39383.1942		36744.4612		7		P
Lead		2.9	17.0369		14.1068		19		P
Lithium			55.8631		54.0573		3		P
Magnesium			9191.6777		8451.3660		8		P
Manganese			474.9427		344.1466		32	*	P
Mercury			0.0140	B	0.0126	B	11		CV
Molybdenum			0.6612	B	0.5311	B	22		P
Nickel			24.7476		22.1233		11		P
Phosphorus			424.9631		362.8718		16		P
Potassium			1830.9252		1676.6631		9		P
Selenium	78		0.1362	B	0.1201	B	13		MS
Silver	107		0.0418	B	0.0484	B	15		MS
Sodium		97.1	173.9408		164.9175		5		P
Strontium	88		41.8252		41.2233		1		MS
Thallium	203	0.2	0.2835		0.2850		1		MS
Tin			3.5951	B	3.4359	B	5		P
Titanium			1337.0427		1310.0641		2		P
Vanadium			75.3971		70.0990		7		P
Zinc			73.8718		67.7252		9		P
Zirconium		4.9	6.3223		6.4233		2		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.



Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	3050B	6010C	III
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	3050B	6020A	III
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	3546	8015M	III
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	3546	8270D SIM	III
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	METHOD	1613B	III
31-May-2013	SL-815-SA5A-SB-0.0-0.5	7078551	N	METHOD	7471B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	3050B	6010C	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	3050B	6020A	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	3546	8015M	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	3546	8270D SIM	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	METHOD	1613B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5	7078552	N	METHOD	7471B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	3050B	6010C	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	3050B	6020A	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	3546	8015M	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	3546	8270D SIM	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	METHOD	1613B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MS	7078553	MS	METHOD	7471B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	3050B	6010C	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	3050B	6020A	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	3546	8015M	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	3546	8270D SIM	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	METHOD	1613B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5MSD	7078554	MSD	METHOD	7471B	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5DUP	7078555	DUP	3050B	6010C	III
31-May-2013	SL-838-SA5A-SB-0.0-0.5DUP	7078555	DUP	3050B	6020A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2013	SL-838-SA5A-SB-0.0-0.5DUP	7078555	DUP	METHOD	7471B	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	3050B	6010C	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	3050B	6020A	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	3546	8015M	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	3546	8270D SIM	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	METHOD	1613B	III
31-May-2013	SL-1238-SA5A-SB-0.0-0.5	7078556	FD	METHOD	7471B	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	3050B	6010C	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	3050B	6020A	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	3546	8015M	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	3546	8270D SIM	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	METHOD	1613B	III
31-May-2013	SL-840-SA5A-SB-0.0-0.5	7078557	N	METHOD	7471B	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	3050B	6010C	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	3050B	6020A	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	3546	8015M	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	3546	8270D SIM	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	METHOD	1613B	III
31-May-2013	SL-839-SA5A-SB-0.0-0.5	7078558	N	METHOD	7471B	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	3050B	6010C	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	3050B	6020A	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	3546	8015M	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	3546	8270D SIM	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	METHOD	1613B	III
31-May-2013	SL-841-SA5A-SB-0.0-0.5	7078559	N	METHOD	7471B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-1238-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.948	J	0.511	MDL	4.09	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.627	J	0.0685	MDL	1.02	PQL	mg/Kg	J	Z
BORON	3.26	J	0.849	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.364	J	0.0337	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	1550		4.11	MDL	20.4	PQL	mg/Kg	J	Q
MOLYBDENUM	0.765	J	0.174	MDL	2.04	PQL	mg/Kg	U	B, B, F
NICKEL	13.5		0.112	MDL	2.04	PQL	mg/Kg	J	A
PHOSPHORUS	423		0.521	MDL	10.2	PQL	mg/Kg	J	Q
SODIUM	65.5	J	17.1	MDL	102	PQL	mg/Kg	J	Z
TIN	2.82	J	0.225	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	3.72	J	0.849	MDL	5.11	PQL	mg/Kg	J	Z

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.631	J	0.510	MDL	4.08	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.558	J	0.0683	MDL	1.02	PQL	mg/Kg	J	Z
BORON	4.02	J	0.846	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.394	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	3130		4.10	MDL	20.4	PQL	mg/Kg	J	Q
MOLYBDENUM	0.621	J	0.173	MDL	2.04	PQL	mg/Kg	U	B, B, F
NICKEL	13.2		0.112	MDL	2.04	PQL	mg/Kg	J	A
PHOSPHORUS	683		0.520	MDL	10.2	PQL	mg/Kg	J	Q
SODIUM	74.4	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	2.64	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.85	J	0.846	MDL	5.10	PQL	mg/Kg	J	Z

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.791	J	0.503	MDL	4.03	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.616	J	0.0675	MDL	1.01	PQL	mg/Kg	J	Z
BORON	3.37	J	0.836	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.321	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	1590		4.05	MDL	20.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.807	J	0.171	MDL	2.01	PQL	mg/Kg	U	B, B, F
NICKEL	12.9		0.111	MDL	2.01	PQL	mg/Kg	J	A
PHOSPHORUS	401		0.513	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	68.6	J	16.8	MDL	101	PQL	mg/Kg	J	Z
TIN	2.71	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.32	J	0.836	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: **SL-839-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.706	J	0.529	MDL	4.23	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.642	J	0.0709	MDL	1.06	PQL	mg/Kg	J	Z
BORON	2.72	J	0.878	MDL	10.6	PQL	mg/Kg	J	Z
CADMIUM	0.343	J	0.0349	MDL	1.06	PQL	mg/Kg	J	Z
CALCIUM	2170		4.25	MDL	21.2	PQL	mg/Kg	J	Q
MOLYBDENUM	0.679	J	0.180	MDL	2.12	PQL	mg/Kg	U	B, B, F
NICKEL	13.4		0.116	MDL	2.12	PQL	mg/Kg	J	A
PHOSPHORUS	437		0.539	MDL	10.6	PQL	mg/Kg	J	Q
SODIUM	64.7	J	17.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.75	J	0.233	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.41	J	0.878	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: **SL-840-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 10:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.604	J	0.560	MDL	4.48	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.729	J	0.0750	MDL	1.12	PQL	mg/Kg	J	Z
BORON	3.50	J	0.930	MDL	11.2	PQL	mg/Kg	J	Z
CADMIUM	0.407	J	0.0370	MDL	1.12	PQL	mg/Kg	J	Z
CALCIUM	3210		4.50	MDL	22.4	PQL	mg/Kg	J	Q
MOLYBDENUM	0.752	J	0.190	MDL	2.24	PQL	mg/Kg	U	B, B, F, F
NICKEL	16.4		0.123	MDL	2.24	PQL	mg/Kg	J	A
PHOSPHORUS	597		0.571	MDL	11.2	PQL	mg/Kg	J	Q
SODIUM	91.8	J	18.7	MDL	112	PQL	mg/Kg	J	Z
TIN	3.11	J	0.246	MDL	11.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-840-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 10:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.42	J	0.930	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-841-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 1:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.681	J	0.507	MDL	4.06	PQL	mg/Kg	UJ	Q, B
BERYLLIUM	0.993	J	0.0680	MDL	1.01	PQL	mg/Kg	J	Z
BORON	1.92	J	0.842	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.135	J	0.0335	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	2470		4.08	MDL	20.3	PQL	mg/Kg	J	Q
MOLYBDENUM	0.709	J	0.172	MDL	2.03	PQL	mg/Kg	U	B, B, F
NICKEL	12.7		0.112	MDL	2.03	PQL	mg/Kg	J	A
PHOSPHORUS	218		0.517	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	86.1	J	16.9	MDL	101	PQL	mg/Kg	J	Z
TIN	3.07	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.66	J	0.842	MDL	5.07	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-1238-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 9:45:00 *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	19.6		0.0348	MDL	0.409	PQL	mg/Kg	J	Q

Sample ID: SL-1238-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 9:45:00 *Analysis Type:* REA2/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.102	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-1238-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 9:45:00 *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0416	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	25.1		0.0347	MDL	0.408	PQL	mg/Kg	J	Q

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.102	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0528	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	18.5		0.0342	MDL	0.403	PQL	mg/Kg	J	Q

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.101	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0398	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: **SL-839-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:15:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	22.1		0.0360	MDL	0.423	PQL	mg/Kg	J	Q

Sample ID: **SL-839-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:15:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.106	MDL	0.423	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: **SL-839-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 1:15:00** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0450	J	0.0212	MDL	0.212	PQL	mg/Kg	J	Z

Sample ID: **SL-840-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 10:45:00** *Analysis Type:* **REA/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	25.3		0.0381	MDL	0.448	PQL	mg/Kg	J	Q

Sample ID: **SL-840-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 10:45:00** *Analysis Type:* **REA2/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.112	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: **SL-841-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 1:45:00** *Analysis Type:* **REA/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	26.6		0.0345	MDL	0.406	PQL	mg/Kg	J	Q

Sample ID: **SL-841-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 1:45:00** *Analysis Type:* **REA2/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.101	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: **SL-841-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 1:45:00** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0548	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: **SL-1238-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 9:45:00** *Analysis Type:* **RES/TOT** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0150	J	0.0101	MDL	0.0168	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-815-SA5A-SB-0.0-0.5 **Collected: 5/31/2013 8:35:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0158	J	0.0099	MDL	0.0165	PQL	mg/Kg	J	Z

Sample ID: SL-838-SA5A-SB-0.0-0.5 **Collected: 5/31/2013 9:35:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0123	J	0.0100	MDL	0.0167	PQL	mg/Kg	J	Z

Sample ID: SL-839-SA5A-SB-0.0-0.5 **Collected: 5/31/2013 1:15:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0173	J	0.0106	MDL	0.0176	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-1238-SA5A-SB-0.0-0.5 **Collected: 5/31/2013 9:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.03	JB	0.0509	MDL	5.20	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.622	JB	0.0172	MDL	5.20	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.0826	JB	0.0265	MDL	5.20	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0997	J	0.0468	MDL	5.20	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.155	JB	0.0376	MDL	5.20	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.675	JBQ	0.0504	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.204	JBQ	0.0340	MDL	5.20	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.762	JB	0.0523	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.594	JB	0.0454	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0997	JBQ	0.0446	MDL	5.20	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.529	JB	0.0313	MDL	5.20	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.194	JBQ	0.0344	MDL	5.20	PQL	ng/Kg	J	Z, FD
2,3,4,7,8-PECDF	0.451	JB	0.0300	MDL	5.20	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.292	JQ	0.0797	MDL	1.04	PQL	ng/Kg	J	Z, FD
OCDD	49.0	B	0.0439	MDL	10.4	PQL	ng/Kg	J	FD
OCDF	1.15	JB	0.0391	MDL	10.4	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.51	JB	0.0353	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.315	JBQ	0.0487	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.253	J	0.0618	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.179	JB	0.0491	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.633	JBQ	0.0683	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.195	JB	0.0477	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.577	JB	0.0685	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.481	JB	0.0545	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0978	JBQ	0.0609	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.267	JB	0.0369	MDL	5.06	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.204	JBQ	0.0501	MDL	5.06	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.363	JB	0.0358	MDL	5.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0862	J	0.0496	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0861	JQ	0.0766	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.87	JB	0.0579	MDL	5.23	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.275	JBQ	0.0123	MDL	5.23	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.0486	JBQ	0.0197	MDL	5.23	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0479	J	0.0398	MDL	5.23	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.0879	JB	0.0244	MDL	5.23	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.495	JB	0.0427	MDL	5.23	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0766	JB	0.0228	MDL	5.23	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.670	JBQ	0.0416	MDL	5.23	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.564	JBQ	0.0301	MDL	5.23	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0679	JBQ	0.0478	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.313	JBQ	0.0234	MDL	5.23	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0603	JB	0.0227	MDL	5.23	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.127	JB	0.0212	MDL	5.23	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	1.05	U	0.0687	MDL	1.05	PQL	ng/Kg	UJ	FD
OCDD	24.5	B	0.0397	MDL	10.5	PQL	ng/Kg	J	Q, Q, FD
OCDF	0.615	JB	0.0360	MDL	10.5	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-839-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 1:15:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.07	JB	0.0292	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.411	JBQ	0.0441	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.188	J	0.0505	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.180	JB	0.0484	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.596	JBQ	0.0561	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.219	JBQ	0.0457	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.588	JBQ	0.0550	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.248	JBQ	0.0579	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.140	JB	0.0454	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.317	JB	0.0316	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.230	JB	0.0466	MDL	5.34	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.395	JB	0.0320	MDL	5.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0545	JQ	0.0391	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.237	J	0.0741	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: **SL-840-SA5A-SB-0.0-0.5** *Collected:* **5/31/2013 10:45:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.23	JB	0.0889	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.40	J	0.0832	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.937	JB	0.0809	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.55	JB	0.0903	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.929	JB	0.0756	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.17	JB	0.0851	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.540	JB	0.0944	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.700	JB	0.0663	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.639	JB	0.0462	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.33	JB	0.0823	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.837	JB	0.0429	MDL	5.63	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0488	JQ	0.0428	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.186	JQ	0.0951	MDL	1.13	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-841-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.260	JBQ	0.0412	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0783	JB	0.0164	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0576	JQ	0.0367	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.104	JB	0.0211	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.124	JBQ	0.0401	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0674	JBQ	0.0201	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0595	JBQ	0.0391	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0781	JBQ	0.0257	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0727	JBQ	0.0382	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.152	JBQ	0.0223	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0890	JBQ	0.0233	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0736	J	0.0415	MDL	1.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0406	JQ	0.0384	MDL	1.04	PQL	ng/Kg	J	Z
OCDD	2.29	JB	0.0414	MDL	10.4	PQL	ng/Kg	J	Z
OCDF	0.249	JB	0.0453	MDL	10.4	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-815-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.5	J	2.1	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-838-SA5A-SB-0.0-0.5 *Collected:* 5/31/2013 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	7.3		2.1	MDL	5.2	PQL	mg/Kg	J	Q, Q
EFH (C30-C40)	18		4.2	MDL	10	PQL	mg/Kg	J	Q, Q

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-1238-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.4	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	0.70	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD

Sample ID: **SL-815-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-Methylnaphthalene	0.73	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.97	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-838-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 9:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.79	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD
CHRYSENE	0.48	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	1.7	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD
NAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.7	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: **SL-839-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-839-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-840-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-Methylnaphthalene	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.39	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	6.8	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-841-SA5A-SB-0.0-0.5** ***Collected:*** **5/31/2013 1:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.77	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Reason Code Legend

Reason Code	*Description*
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

PH044

Method Blank Outlier Report

Lab Reporting Batch ID: PH044

Laboratory: LL

EDD Filename: PrepPH044_v1

eQAPP Name: CDM_SSFL_130705_Lan

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1610B371903	6/11/2013 7:03:00 PM	1,2,3,4,6,7,8-HPCDD	0.109 ng/Kg	SL-1238-SA5A-SB-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0530 ng/Kg	SL-815-SA5A-SB-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0357 ng/Kg	SL-838-SA5A-SB-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0410 ng/Kg	SL-839-SA5A-SB-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0393 ng/Kg	SL-840-SA5A-SB-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0219 ng/Kg	SL-841-SA5A-SB-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0384 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0272 ng/Kg	
		1,2,3,7,8-PECDD	0.0895 ng/Kg	
		1,2,3,7,8-PECDF	0.0769 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0370 ng/Kg	
		2,3,4,7,8-PECDF	0.0332 ng/Kg	
		OCDD	0.225 ng/Kg	
		OCDF	0.145 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-1238-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0826 ng/Kg	0.0826U ng/Kg
SL-1238-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-1238-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0997 ng/Kg	0.0997U ng/Kg
SL-815-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-815-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0978 ng/Kg	0.0978U ng/Kg
SL-815-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.267 ng/Kg	0.267U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0486 ng/Kg	0.0486U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0879 ng/Kg	0.0879U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0766 ng/Kg	0.0766U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0679 ng/Kg	0.0679U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.313 ng/Kg	0.313U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0603 ng/Kg	0.0603U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.127 ng/Kg	0.127U ng/Kg
SL-838-SA5A-SB-0.0-0.5(RES)	OCDF	0.615 ng/Kg	0.615U ng/Kg
SL-839-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-839-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.140 ng/Kg	0.140U ng/Kg
SL-839-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.317 ng/Kg	0.317U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.260 ng/Kg	0.260U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0783 ng/Kg	0.0783U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0674 ng/Kg	0.0674U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Method Blank Outlier Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0674 ng/Kg	0.0674U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.0595 ng/Kg	0.0595U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0781 ng/Kg	0.0781U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0727 ng/Kg	0.0727U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.152 ng/Kg	0.152U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0890 ng/Kg	0.0890U ng/Kg
SL-841-SA5A-SB-0.0-0.5(RES)	OCDF	0.249 ng/Kg	0.249U ng/Kg

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB221750	6/4/2013 5:50:00 PM	CALCIUM	6.04 mg/Kg	SL-1238-SA5A-SB-0.0-0.5
		CHROMIUM	0.279 mg/Kg	SL-815-SA5A-SB-0.0-0.5
		IRON	4.01 mg/Kg	SL-838-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.215 mg/Kg	SL-839-SA5A-SB-0.0-0.5
		NICKEL	0.323 mg/Kg	SL-840-SA5A-SB-0.0-0.5
		PHOSPHORUS	1.44 mg/Kg	SL-841-SA5A-SB-0.0-0.5
		TIN	1.46 mg/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-1238-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.765 mg/Kg	0.765U mg/Kg
SL-1238-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-815-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.621 mg/Kg	0.621U mg/Kg
SL-815-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-838-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.807 mg/Kg	0.807U mg/Kg
SL-838-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-839-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.679 mg/Kg	0.679U mg/Kg
SL-839-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-840-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.752 mg/Kg	0.752U mg/Kg
SL-840-SA5A-SB-0.0-0.5(RES/TOT)	TIN	3.11 mg/Kg	3.11U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-841-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.709 mg/Kg	0.709U mg/Kg
SL-841-SA5A-SB-0.0-0.5(RES/TOT)	TIN	3.07 mg/Kg	3.07U mg/Kg

Method: **6020A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15437BB222006A	6/9/2013 8:06:00 PM	STRONTIUM	0.0361 mg/Kg	SL-1238-SA5A-SB-0.0-0.5 SL-815-SA5A-SB-0.0-0.5 SL-838-SA5A-SB-0.0-0.5 SL-839-SA5A-SB-0.0-0.5 SL-840-SA5A-SB-0.0-0.5 SL-841-SA5A-SB-0.0-0.5

Field Blank Outlier Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2/TOT)	4/11/2013 3:00:00 PM	COPPER	0.0036 mg/L	SL-1238-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0036 mg/L	SL-815-SA5A-SB-0.0-0.5
				SL-838-SA5A-SB-0.0-0.5
				SL-839-SA5A-SB-0.0-0.5
				SL-840-SA5A-SB-0.0-0.5
				SL-841-SA5A-SB-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-1238-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.765 mg/Kg	0.765U mg/Kg
SL-815-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.621 mg/Kg	0.621U mg/Kg
SL-838-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.807 mg/Kg	0.807U mg/Kg
SL-839-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.679 mg/Kg	0.679U mg/Kg
SL-840-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.752 mg/Kg	0.752U mg/Kg
SL-841-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.709 mg/Kg	0.709U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH044

Laboratory: LL

EDD Filename: PrepPH044_v1

eQAPP Name: CDM_SSFL_130705_Lan

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-838-SA5A-SB-0.0-0.5MS SL-838-SA5A-SB-0.0-0.5MSD (SL-838-SA5A-SB-0.0-0.5)	EFH (C12-C14)	-	-	49.00-123.00	40 (20.00)	EFH (C12-C14)	
	EFH (C15-C20)	218	125	49.00-123.00	54 (20.00)	EFH (C15-C20)	
	EFH (C21-C30)	437	142	49.00-123.00	65 (20.00)	EFH (C21-C30)	J (all detects)
	EFH (C30-C40)	293	-	49.00-123.00	39 (20.00)	EFH (C30-C40)	
	EFH (C8-C11)	-	-	49.00-123.00	32 (20.00)	EFH (C8-C11)	

Method: 1613B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-838-SA5A-SB-0.0-0.5MS SL-838-SA5A-SB-0.0-0.5MSD (SL-838-SA5A-SB-0.0-0.5)	OCDD	144	-	40.00-135.00	36 (20.00)	OCDD	J(all detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-838-SA5A-SB-0.0-0.5MS (TOT) SL-838-SA5A-SB-0.0-0.5MSD (TOT) (SL-1238-SA5A-SB-0.0-0.5 SL-815-SA5A-SB-0.0-0.5 SL-838-SA5A-SB-0.0-0.5 SL-839-SA5A-SB-0.0-0.5 SL-840-SA5A-SB-0.0-0.5 SL-841-SA5A-SB-0.0-0.5)	ALUMINUM	1903	1658	75.00-125.00	-	ALUMINUM	
	CALCIUM	213	183	75.00-125.00	-	CALCIUM	
	POTASSIUM	128	-	75.00-125.00	-	POTASSIUM	
	TITANIUM	412	364	75.00-125.00	-	TITANIUM	J(all detects)
							Al, K, Ti, No Qual, >4x
SL-838-SA5A-SB-0.0-0.5MS (TOT) SL-838-SA5A-SB-0.0-0.5MSD (TOT) (SL-1238-SA5A-SB-0.0-0.5 SL-815-SA5A-SB-0.0-0.5 SL-838-SA5A-SB-0.0-0.5 SL-839-SA5A-SB-0.0-0.5 SL-840-SA5A-SB-0.0-0.5 SL-841-SA5A-SB-0.0-0.5)	IRON	399	-653	75.00-125.00	-	IRON	No Qual, >4x

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-838-SA5A-SB-0.0-0.5MS (TOT) SL-838-SA5A-SB-0.0-0.5MSD (TOT) (SL-1238-SA5A-SB-0.0-0.5 SL-815-SA5A-SB-0.0-0.5 SL-838-SA5A-SB-0.0-0.5 SL-839-SA5A-SB-0.0-0.5 SL-840-SA5A-SB-0.0-0.5 SL-841-SA5A-SB-0.0-0.5)	ANTIMONY	60	59	75.00-125.00	-	ANTIMONY	
	MAGNESIUM	171	69	75.00-125.00	-	MAGNESIUM	
	MANGANESE	132	57	75.00-125.00	-	MANGANESE	J(all detects)
	PHOSPHORUS	-	60	75.00-125.00	-	PHOSPHORUS	UJ(all non-detects)
							Mg, Mn, No Qual, >4x

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-838-SA5A-SB-0.0-0.5MS (TOT) SL-838-SA5A-SB-0.0-0.5MSD (TOT) (SL-1238-SA5A-SB-0.0-0.5 SL-815-SA5A-SB-0.0-0.5 SL-838-SA5A-SB-0.0-0.5 SL-839-SA5A-SB-0.0-0.5 SL-840-SA5A-SB-0.0-0.5 SL-841-SA5A-SB-0.0-0.5)	STRONTIUM	148	129	75.00-125.00	-	STRONTIUM	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-838-SA5A-SB-0.0-0.5DUP (TOT)	SELENIUM	38	20.00	
(SL-1238-SA5A-SB-0.0-0.5	SILVER	45	20.00	
SL-815-SA5A-SB-0.0-0.5				No Qual, OK by Difference
SL-838-SA5A-SB-0.0-0.5				
SL-839-SA5A-SB-0.0-0.5				
SL-840-SA5A-SB-0.0-0.5				
SL-841-SA5A-SB-0.0-0.5)				

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Field Duplicate RPD Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5	SL-1238-SA5A-SB-0.0-0.5			
MOISTURE	4.5	4.1	9		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5	SL-1238-SA5A-SB-0.0-0.5			
1,2,3,6,7,8-HXCDD	0.495	0.675	31	50.00	
1,2,3,7,8,9-HXCDD	0.670	0.762	13	50.00	
1,2,3,7,8,9-HXCDF	0.564	0.594	5	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.0679	0.0997	38	50.00	
TEQ WHO 2005 - EDLx0.0	0.141	0.375	91	50.00	
1,2,3,4,6,7,8-HPCDD	1.87	4.03	73	50.00	
1,2,3,4,6,7,8-HPCDF	0.275	0.622	77	50.00	
1,2,3,4,7,8,9-HPCDF	0.0486	0.0826	52	50.00	
1,2,3,4,7,8-HxCDD	0.0479	0.0997	70	50.00	
1,2,3,4,7,8-HXCDF	0.0879	0.155	55	50.00	
1,2,3,6,7,8-HXCDF	0.0766	0.204	91	50.00	J(all detects)
1,2,3,7,8-PECDF	0.313	0.529	51	50.00	UJ(all non-detects)
2,3,4,6,7,8-HXCDF	0.0603	0.194	105	50.00	
2,3,4,7,8-PECDF	0.127	0.451	112	50.00	
2,3,7,8-TCDF	1.05 U	0.292	200	50.00	
OCDD	24.5	49.0	67	50.00	
OCDF	0.615	1.15	61	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Field Duplicate RPD Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5 (TOT)	SL-1238-SA5A-SB-0.0-0.5 (TOT)			
ALUMINUM	15300	15300	0	50.00	
ANTIMONY	0.791	0.948	18	50.00	
ARSENIC	4.41	4.38	1	50.00	
BARIUM	103	106	3	50.00	
BERYLLIUM	0.616	0.627	2	50.00	
BORON	3.37	3.26	3	50.00	
CADMIUM	0.321	0.364	13	50.00	
CALCIUM	1590	1550	3	50.00	
CHROMIUM	21.7	21.8	0	50.00	
COBALT	6.05	6.49	7	50.00	
COPPER	11.9	12.4	4	50.00	
IRON	20800	21100	1	50.00	
LEAD	6.56	9.58	37	50.00	No Qualifiers Applied
LITHIUM	19.3	19.5	1	50.00	
MAGNESIUM	4100	4070	1	50.00	
MANGANESE	281	372	28	50.00	
MOLYBDENUM	0.807	0.765	5	50.00	
NICKEL	12.9	13.5	5	50.00	
PHOSPHORUS	401	423	5	50.00	
POTASSIUM	4040	4040	0	50.00	
SODIUM	68.6	65.5	5	50.00	
TIN	2.71	2.82	4	50.00	
TITANIUM	1140	1150	1	50.00	
VANADIUM	35.8	36.4	2	50.00	
ZINC	58.3	60.1	3	50.00	
Zirconium	3.32	3.72	11	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5 (TOT)	SL-1238-SA5A-SB-0.0-0.5 (TOT)			
SELENIUM	0.150	0.103	37	50.00	
SILVER	0.0398	0.0416	4	50.00	No Qualifiers Applied
STRONTIUM	18.5	19.6	6	50.00	
THALLIUM	0.261	0.268	3	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Field Duplicate RPD Report

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5 (TOT)	SL-1238-SA5A-SB-0.0-0.5 (TOT)			
MERCURY	0.0123	0.0150	20	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5	SL-1238-SA5A-SB-0.0-0.5			
EFH (C21-C30)	7.3	11	40	50.00	No Qualifiers Applied
EFH (C30-C40)	18	21	15	50.00	

Method: 8270D SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5	SL-1238-SA5A-SB-0.0-0.5			
2-METHYLNAPHTHALENE	0.79	1.1	33	50.00	No Qualifiers Applied
NAPHTHALENE	1.1	1.4	24	50.00	
BENZO(B)FLUORANTHENE	1.7 U	0.96	200	50.00	
CHRYSENE	0.48	1.4	98	50.00	J(all detects)
FLUORANTHENE	1.7 U	0.70	200	50.00	UJ(all non-detects)
PHENANTHRENE	1.7 U	1.2	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-838-SA5A-SB-0.0-0.5	SL-1238-SA5A-SB-0.0-0.5			
PH	5.45	5.24	4	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1238-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.03	5.20	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.622	5.20	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0826	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0997	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.155	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.675	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.204	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.762	5.20	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.594	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0997	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.529	5.20	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.194	5.20	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.451	5.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.292	1.04	PQL	ng/Kg	
	OCDF	JB	1.15	10.4	PQL	ng/Kg	
SL-815-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.51	5.06	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.315	5.06	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.253	5.06	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.179	5.06	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.633	5.06	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.195	5.06	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.577	5.06	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.481	5.06	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0978	5.06	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.267	5.06	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.204	5.06	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.363	5.06	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0862	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0861	1.01	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-838-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.87	5.23	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.275	5.23	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0486	5.23	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0479	5.23	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0879	5.23	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.495	5.23	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0766	5.23	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.670	5.23	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.564	5.23	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0679	5.23	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.313	5.23	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0603	5.23	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.127	5.23	PQL	ng/Kg	
	OCDF	JB	0.615	10.5	PQL	ng/Kg	
SL-839-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.07	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.411	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.188	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.180	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.596	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.219	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.588	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.248	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.140	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.317	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.230	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.395	5.34	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0545	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.237	1.07	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-840-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.23	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	1.40	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.937	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.55	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.929	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.17	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.540	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.700	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.639	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.33	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.837	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0488	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.186	1.13	PQL	ng/Kg	
SL-841-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.260	5.22	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0783	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0576	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.104	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.124	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0674	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0595	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0781	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0727	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.152	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0890	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0736	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0406	1.04	PQL	ng/Kg	
	OCDD	JB	2.29	10.4	PQL	ng/Kg	
	OCDF	JB	0.249	10.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1238-SA5A-SB-0.0-0.5	ANTIMONY	J	0.948	4.09	PQL	mg/Kg	
	BERYLLIUM	J	0.627	1.02	PQL	mg/Kg	
	BORON	J	3.26	10.2	PQL	mg/Kg	
	CADMIUM	J	0.364	1.02	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.765	2.04	PQL	mg/Kg	
	SODIUM	J	65.5	102	PQL	mg/Kg	
	TIN	J	2.82	10.2	PQL	mg/Kg	
	Zirconium	J	3.72	5.11	PQL	mg/Kg	
SL-815-SA5A-SB-0.0-0.5	ANTIMONY	J	0.631	4.08	PQL	mg/Kg	
	BERYLLIUM	J	0.558	1.02	PQL	mg/Kg	
	BORON	J	4.02	10.2	PQL	mg/Kg	
	CADMIUM	J	0.394	1.02	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.621	2.04	PQL	mg/Kg	
	SODIUM	J	74.4	102	PQL	mg/Kg	
	TIN	J	2.64	10.2	PQL	mg/Kg	
	Zirconium	J	2.85	5.10	PQL	mg/Kg	
SL-838-SA5A-SB-0.0-0.5	ANTIMONY	J	0.791	4.03	PQL	mg/Kg	
	BERYLLIUM	J	0.616	1.01	PQL	mg/Kg	
	BORON	J	3.37	10.1	PQL	mg/Kg	
	CADMIUM	J	0.321	1.01	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.807	2.01	PQL	mg/Kg	
	SODIUM	J	68.6	101	PQL	mg/Kg	
	TIN	J	2.71	10.1	PQL	mg/Kg	
	Zirconium	J	3.32	5.03	PQL	mg/Kg	
SL-839-SA5A-SB-0.0-0.5	ANTIMONY	J	0.706	4.23	PQL	mg/Kg	
	BERYLLIUM	J	0.642	1.06	PQL	mg/Kg	
	BORON	J	2.72	10.6	PQL	mg/Kg	
	CADMIUM	J	0.343	1.06	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.679	2.12	PQL	mg/Kg	
	SODIUM	J	64.7	106	PQL	mg/Kg	
	TIN	J	2.75	10.6	PQL	mg/Kg	
	Zirconium	J	3.41	5.29	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-840-SA5A-SB-0.0-0.5	ANTIMONY	J	0.604	4.48	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.729	1.12	PQL	mg/Kg	
	BORON	J	3.50	11.2	PQL	mg/Kg	
	CADMIUM	J	0.407	1.12	PQL	mg/Kg	
	MOLYBDENUM	J	0.752	2.24	PQL	mg/Kg	
	SODIUM	J	91.8	112	PQL	mg/Kg	
	TIN	J	3.11	11.2	PQL	mg/Kg	
	Zirconium	J	4.42	5.60	PQL	mg/Kg	
SL-841-SA5A-SB-0.0-0.5	ANTIMONY	J	0.681	4.06	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.993	1.01	PQL	mg/Kg	
	BORON	J	1.92	10.1	PQL	mg/Kg	
	CADMIUM	J	0.135	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.709	2.03	PQL	mg/Kg	
	SODIUM	J	86.1	101	PQL	mg/Kg	
	TIN	J	3.07	10.1	PQL	mg/Kg	
	Zirconium	J	3.66	5.07	PQL	mg/Kg	

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1238-SA5A-SB-0.0-0.5	SELENIUM	J	0.103	0.409	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0416	0.204	PQL	mg/Kg	
SL-815-SA5A-SB-0.0-0.5	SELENIUM	J	0.168	0.408	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0528	0.204	PQL	mg/Kg	
SL-838-SA5A-SB-0.0-0.5	SELENIUM	J	0.150	0.403	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0398	0.201	PQL	mg/Kg	
SL-839-SA5A-SB-0.0-0.5	SELENIUM	J	0.128	0.423	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0450	0.212	PQL	mg/Kg	
SL-840-SA5A-SB-0.0-0.5	SELENIUM	J	0.136	0.448	PQL	mg/Kg	J (all detects)
SL-841-SA5A-SB-0.0-0.5	SELENIUM	J	0.184	0.406	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0548	0.203	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1238-SA5A-SB-0.0-0.5	MERCURY	J	0.0150	0.0168	PQL	mg/Kg	J (all detects)
SL-815-SA5A-SB-0.0-0.5	MERCURY	J	0.0158	0.0165	PQL	mg/Kg	J (all detects)
SL-838-SA5A-SB-0.0-0.5	MERCURY	J	0.0123	0.0167	PQL	mg/Kg	J (all detects)
SL-839-SA5A-SB-0.0-0.5	MERCURY	J	0.0173	0.0176	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-815-SA5A-SB-0.0-0.5	EFH (C15-C20)	J	2.5	5.1	PQL	mg/Kg	J (all detects)

Method: 8270D SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-1238-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	0.96	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.70	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.7	PQL	ug/Kg	
SL-815-SA5A-SB-0.0-0.5	1-Methylnaphthalene	J	0.73	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	0.97	1.7	PQL	ug/Kg	
SL-838-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.79	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.48	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
SL-839-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.8	PQL	ug/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Reporting Limit Outliers

Lab Reporting Batch ID: PH044 **Laboratory: LL**

EDD Filename: PrepPH044_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-840-SA5A-SB-0.0-0.5	1-Methylnaphthalene	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	1.9	PQL	ug/Kg	
	ANTHRACENE	J	0.39	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.7	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
SL-841-SA5A-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.77	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	

LDC #: 30037D4

SDG #: PH044

Laboratory: Eurofins Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/25/13

Page: 1 of 1

Reviewer: CA

2nd Reviewer: V

METHOD: Metals (EPA SW 846 Method 6010C/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	—	Sampling dates: 5/31/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	NA	DUP
VIII.	Laboratory Control Samples (LCS)	NA	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ni (14%D) (J/UJ) (Reason: A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	(2,3)
XV	Field Blanks	SW	EB=EB052913(PH012) EB-053013(PH043) FB=FB-041113 (PH029)

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-815-SA5A-SB-0.0-0.5	11		21		31	
2	SL-838-SA5A-SB-0.0-0.5	12		22		32	
3	SL-1238-SA5A-SB-0.0-0.5	13		23		33	
4	SL-840-SA5A-SB-0.0-0.5	14		24		34	
5	SL-839-SA5A-SB-0.0-0.5	15		25		35	
6	SL-841-SA5A-SB-0.0-0.5	16		26		36	
7	SL-838-SA5A-SB-0.0-0.5MS	17		27		37	
8	SL-838-SA5A-SB-0.0-0.5MSD	18		28		38	
9	SL-838-SA5A-SB-0.0-0.5DUP	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 30037D4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2	3	4	5	6						
Sb			3.1	1.55	0.63	0.79	0.95	0.60	0.71	0.68						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	2											
Mo			2.2	1.1	0.81											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 3-6

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	3	4	5	6							
Mo			2.1	1.05	0.62	0.76	0.75	0.68	0.71							

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 30037D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg Reason: F
Sampling date: 4/11/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	1	2	3	4	5	6				
Cu	0.0036	1.8										
Mo	0.0036	1.8	0.62	0.81	0.76	0.75	0.68	0.71				

Sampling date: 5/29/13 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 4

Analyte	Blank ID	Sample Identification										
	EB-052913 (SDG: PH042)	Action Limit	4									
Ca	0.0718	35.9										
Mn	.0013	0.65										
Mo	0.0049	2.45	0.75									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: PH044
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7078552BKG Matrix Spike Lab Sample ID: 7078553MS Matrix Spike Duplicate Lab Sample ID: 7078554MSD
Batch Id(s): P15437B, P16038A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		14593.7837		18252.7856		17783.0298		192.3077	192.3077	MG/KG	1903		1658		3	*		20	P
Antimony		0.7558	B	29.3990		29.3067		48.0769	48.0769	MG/KG	60	N	59	N	0		75 - 125	20	P
Arsenic		4.2135		18.2885		18.0317		14.4231	14.4231	MG/KG	98		96		1		75 - 125	20	P
Barium		98.4029		286.7327		280.6481		192.3077	192.3077	MG/KG	98		95		2		75 - 125	20	P
Beryllium		0.5885	B	5.5760		5.4029		4.8077	4.8077	MG/KG	104		100		3		75 - 125	20	P
Boron		3.2221	B	192.4702		187.2510		192.3077	192.3077	MG/KG	98		96		3		75 - 125	20	P
Cadmium		0.3067	B	4.8865		4.7654		4.8077	4.8077	MG/KG	95		93		3		75 - 125	20	P
Calcium		1516.5298		2335.6327		2221.7596		384.6154	384.6154	MG/KG	213	N	183	N	5	*	75 - 125	20	P
Chromium		20.7096		43.6788		40.7913		19.2308	19.2308	MG/KG	119		104		7		75 - 125	20	P
Cobalt		5.7769		52.0510		50.2279		48.0769	48.0769	MG/KG	96		92		4		75 - 125	20	P
Copper		11.3692		36.5231		35.5269		24.0385	24.0385	MG/KG	105		100		3		75 - 125	20	P
Iron		19859.0913		20242.3029		19230.8135		96.1538	96.1538	MG/KG	399	*	653		5			20	P
Lead		6.2644		19.8019		19.4615		14.4231	14.4231	MG/KG	94		91		2		75 - 125	20	P
Lithium		18.4788		116.4750		113.7788		96.1538	96.1538	MG/KG	102		99		2		75 - 125	20	P
Magnesium		3917.8654		4246.7644		4049.7865		192.3077	192.3077	MG/KG	171		69		5			20	P
Manganese		268.4298		331.8231		296.0096		48.0769	48.0769	MG/KG	132		57	*	11			20	P
Mercury		0.0117	B	0.1707		0.1686		0.1620	0.1614	MG/KG	98		97		1		65 - 135	20	CV
Molybdenum		0.7712	B	188.0538		181.1923		192.3077	192.3077	MG/KG	97		94		4		75 - 125	20	P
Nickel		12.3481		59.5538		57.7519		48.0769	48.0769	MG/KG	98		94		3		75 - 125	20	P
Phosphorus		383.2538		458.4038		440.8615		96.1538	96.1538	MG/KG	78		60	N	4		75 - 125	20	P
Potassium		3857.1788		5086.1788		4907.8413		961.5385	961.5385	MG/KG	128	*	109		4			20	P
Selenium	78	0.1434	B	1.9519		2.1288		1.9231	1.9231	MG/KG	94		103		9		75 - 125	20	MS
Silver	107	0.0380	B	9.9231		9.9000		9.6154	9.6154	MG/KG	103		103		0		75 - 125	20	MS
Sodium		65.4990	B	1026.2769		1002.8115		961.5385	961.5385	MG/KG	100		97		2		75 - 125	20	P
Strontium	88	17.6981		29.0769		27.6538		7.6923	7.6923	MG/KG	148	N	129	N	5	*	75 - 125	20	MS
Thallium	203	0.2490		0.6806		0.6652		0.3846	0.3846	MG/KG	112		108		2		75 - 125	20	MS
Tin		2.5894	B	355.2087		343.8500		384.6154	384.6154	MG/KG	92		89		3		75 - 125	20	P
Titanium		1084.6615		1480.5971		1434.5356		96.1538	96.1538	MG/KG	412		364		3			20	P
Vanadium		34.1760		87.9144		85.3567		48.0769	48.0769	MG/KG	112		106		3		75 - 125	20	P
Zinc		55.7144		102.3904		99.7163		48.0769	48.0769	MG/KG	97		92		3		75 - 125	20	P
Zirconium		3.1750	B	87.9317		86.3750		96.1538	96.1538	MG/KG	88		87		2		75 - 125	20	P

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: PH044
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7078552BKG
Batch ID(s): P15437B, P16038A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 7078555DUP

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			14593.7837		13893.6779		5		P
Antimony			0.7558	B	0.6971	B	8		P
Arsenic		3.8	4.2135		4.3827		4		P
Barium			98.4029		96.1846		2		P
Beryllium			0.5885	B	0.5702	B	3		P
Boron			3.2221	B	2.9087	B	10		P
Cadmium			0.3067	B	0.2740	B	11		P
Calcium			1516.5298		1427.8750		6		P
Chromium			20.7096		20.9827		1		P
Cobalt			5.7769		5.4856		5		P
Copper			11.3692		10.8231		5		P
Iron			19859.0913		19736.0308		1		P
Lead		2.9	6.2644		5.7990		8		P
Lithium		3.8	18.4788		17.5144		5		P
Magnesium			3917.8654		3847.8385		2		P
Manganese			268.4298		262.2019		2		P
Mercury			0.0117	B	0.0108	B	8		CV
Molybdenum			0.7712	B	0.8558	B	10		P
Nickel			12.3481		12.3154		0		P
Phosphorus			383.2538		374.4096		2		P
Potassium			3857.1788		3824.9635		1		P
Selenium	78		0.1434	B	0.0974	B	38	*	MS
Silver	107		0.0380	B	0.0241	B	45	*	MS
Sodium			65.4990	B	63.7510	B	3		P
Strontium	88		17.6981		16.7038		6		MS
Thallium	203	0.2	0.2490		0.2842		13		MS
Tin			2.5894	B	2.7106	B	5		P
Titanium			1084.6615		1035.1510		5		P
Vanadium			34.1760		33.2452		3		P
Zinc			55.7144		54.4144		2		P
Zirconium			3.1750	B	3.0144	B	5		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.



Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	3050B	6010C	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	3050B	6020A	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	3546	8015M	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	3546	8270D SIM	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	METHOD	1613B	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5	7083688	N	METHOD	7471B	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5MSD	P083688M321802A	MSD	3546	8015M	III
04-Jun-2013	SL-772-SA5A-SB-0.0-0.5MS	P083688R321742A	MS	3546	8015M	III
05-Jun-2013	TB-060513	7083689	TB	5030B	8015M	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	3050B	6010C	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	3050B	6020A	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	3546	8015M	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	3546	8082A	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	3546	8270D SIM	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	METHOD	1613B	III
05-Jun-2013	SL-811-SA5A-SB-0.0-0.5	7083690	N	METHOD	7471B	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	3050B	6010C	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	3050B	6020A	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	3546	8015M	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	3546	8082A	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	3546	8270D SIM	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	5035A	8015M	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	METHOD	1613B	III
05-Jun-2013	SL-811-SA5A-SB-5.5-6.5	7083691	N	METHOD	7471B	III
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	3050B	6010C	III
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	3050B	6020A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	3546	8015M	III
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	3546	8270D SIM	III
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	METHOD	1613B	III
05-Jun-2013	SL-813-SA5A-SB-0.0-0.5	7083692	N	METHOD	7471B	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	3050B	6010C	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	3050B	6020A	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	3546	8015M	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	3546	8270D SIM	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	METHOD	1613B	III
05-Jun-2013	SL-814-SA5A-SB-0.0-0.5	7083693	N	METHOD	7471B	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	3050B	6010C	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	3050B	6020A	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	3546	8015M	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	3546	8270D SIM	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	5035A	8015M	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	METHOD	1613B	III
05-Jun-2013	SL-814-SA5A-SB-4.0-5.0	7083694	N	METHOD	7471B	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	3050B	6010C	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	3050B	6020A	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	3546	8015M	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	3546	8270D SIM	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	METHOD	1613B	III
05-Jun-2013	SL-858-SA5A-SB-0.0-0.5	7083695	N	METHOD	7471B	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	3050B	6010C	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	3050B	6020A	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	3546	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	3546	8082A	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	3546	8270D SIM	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	METHOD	1613B	III
05-Jun-2013	SL-861-SA5A-SB-0.0-0.5	7083696	N	METHOD	7471B	III
05-Jun-2013	EB1-060513	7083686	EB	3005A	6010C	III
05-Jun-2013	EB1-060513	7083686	EB	3510C	8015M	III
05-Jun-2013	EB1-060513	7083686	EB	3510C	8082A	III
05-Jun-2013	EB1-060513	7083686	EB	3510C	8270D SIM	III
05-Jun-2013	EB1-060513	7083686	EB	5030B	8015M	III
05-Jun-2013	EB1-060513	7083686	EB	M3010A	6020A	III
05-Jun-2013	EB1-060513	7083686	EB	METHOD	1613B	III
05-Jun-2013	EB1-060513	7083686	EB	METHOD	7470A	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	3050B	6010C	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	3050B	6020A	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	3546	8015M	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	3546	8082A	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	3546	8270D SIM	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	5035A	8015M	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	METHOD	1613B	III
05-Jun-2013	SL-861-SA5A-SB-4.0-5.0	7083697	N	METHOD	7471B	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	3050B	6010C	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	3050B	6020A	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	3546	8015M	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	3546	8082A	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	3546	8270D SIM	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	5035A	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	METHOD	1613B	III
05-Jun-2013	SL-861-SA5A-SB-7.0-8.0	7083698	N	METHOD	7471B	III
05-Jun-2013	EB2-060513	7083687	EB	3005A	6010C	III
05-Jun-2013	EB2-060513	7083687	EB	3510C	8015M	III
05-Jun-2013	EB2-060513	7083687	EB	3510C	8082A	III
05-Jun-2013	EB2-060513	7083687	EB	3510C	8270D SIM	III
05-Jun-2013	EB2-060513	7083687	EB	5030B	8015M	III
05-Jun-2013	EB2-060513	7083687	EB	M3010A	6020A	III
05-Jun-2013	EB2-060513	7083687	EB	METHOD	1613B	III
05-Jun-2013	EB2-060513	7083687	EB	METHOD	7470A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: EB1-060513 **Collected: 6/5/2013 3:00:00 PM** **Analysis Type: REA4/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	0.00045	J	0.00033	MDL	0.0100	PQL	mg/L	J	Z
CADMIUM	0.00036	J	0.00036	MDL	0.0100	PQL	mg/L	U	B
MOLYBDENUM	0.0084	J	0.0029	MDL	0.0200	PQL	mg/L	U	B

Sample ID: EB2-060513 **Collected: 6/5/2013 3:30:00 PM** **Analysis Type: REA4/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.00048	J	0.00036	MDL	0.0100	PQL	mg/L	U	B

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-772-SA5A-SB-0.0-0.5 **Collected: 6/4/2013 2:25:00 PM** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.807	J	0.181	MDL	2.12	PQL	mg/Kg	U	B, F, F
TIN	3.84	J	0.234	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.882	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-811-SA5A-SB-0.0-0.5 **Collected: 6/5/2013 8:45:00 AM** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.630	J	0.0658	MDL	0.983	PQL	mg/Kg	J	Z
BORON	3.25	J	0.816	MDL	9.83	PQL	mg/Kg	J	Z
CADMIUM	0.418	J	0.0324	MDL	0.983	PQL	mg/Kg	J	Z
MOLYBDENUM	0.170	J	0.167	MDL	1.97	PQL	mg/Kg	U	B, F, F
SODIUM	80.3	J	16.4	MDL	98.3	PQL	mg/Kg	J	Z
TIN	2.79	J	0.216	MDL	9.83	PQL	mg/Kg	U	B
Zirconium	1.15	J	0.816	MDL	4.91	PQL	mg/Kg	J	Z

Sample ID: SL-811-SA5A-SB-5.5-6.5 **Collected: 6/5/2013 9:00:00 AM** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.724	J	0.0683	MDL	1.02	PQL	mg/Kg	J	Z
BORON	2.11	J	0.846	MDL	10.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-811-SA5A-SB-5.5-6.5** ***Collected:*** **6/5/2013 9:00:00 AM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.309	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
MOLYBDENUM	0.181	J	0.173	MDL	2.04	PQL	mg/Kg	U	B, F, F
SODIUM	98.6	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	3.13	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.27	J	0.846	MDL	5.09	PQL	mg/Kg	J	Z

Sample ID: **SL-813-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 9:45:00 AM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.62	J	0.331	MDL	4.02	PQL	mg/Kg	J	Z
BERYLLIUM	0.557	J	0.0673	MDL	1.00	PQL	mg/Kg	J	Z
BORON	3.44	J	0.833	MDL	10.0	PQL	mg/Kg	J	Z
CADMIUM	0.507	J	0.0331	MDL	1.00	PQL	mg/Kg	J	Z
MOLYBDENUM	0.251	J	0.171	MDL	2.01	PQL	mg/Kg	U	B, F
SODIUM	69.3	J	16.8	MDL	100	PQL	mg/Kg	J	Z
TIN	2.85	J	0.221	MDL	10.0	PQL	mg/Kg	U	B

Sample ID: **SL-814-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 10:25:00** ***Analysis Type:*** **REA2/TOT** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.36	J	0.911	MDL	10.1	PQL	mg/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 10:25:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.96	J	0.334	MDL	4.05	PQL	mg/Kg	J	Z
BERYLLIUM	0.403	J	0.0678	MDL	1.01	PQL	mg/Kg	J	Z
BORON	3.42	J	0.840	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.462	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
SODIUM	65.7	J	16.9	MDL	101	PQL	mg/Kg	J	Z
TIN	2.59	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.02	J	0.840	MDL	5.06	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-814-SA5A-SB-4.0-5.0** ***Collected:*** **6/5/2013 10:40:00** ***Analysis Type:*** **REA/TOT** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.98	J	0.942	MDL	10.5	PQL	mg/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-4.0-5.0** ***Collected:*** **6/5/2013 10:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.758	J	0.0701	MDL	1.05	PQL	mg/Kg	J	Z
BORON	2.41	J	0.869	MDL	10.5	PQL	mg/Kg	J	Z
CADMIUM	0.334	J	0.0345	MDL	1.05	PQL	mg/Kg	J	Z
TIN	3.14	J	0.230	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.36	J	0.869	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: **SL-858-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 1:50:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.00	J	0.340	MDL	4.12	PQL	mg/Kg	J	Z
BERYLLIUM	0.567	J	0.0690	MDL	1.03	PQL	mg/Kg	J	Z
BORON	2.88	J	0.855	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.694	J	0.0340	MDL	1.03	PQL	mg/Kg	J	Z
MOLYBDENUM	0.206	J	0.175	MDL	2.06	PQL	mg/Kg	U	B, F
SODIUM	87.1	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	2.98	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	0.902	J	0.855	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: **SL-861-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 2:20:00 PM** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.606	J	0.0687	MDL	1.03	PQL	mg/Kg	J	Z
BORON	3.52	J	0.852	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.568	J	0.0339	MDL	1.03	PQL	mg/Kg	J	Z
MOLYBDENUM	0.257	J	0.174	MDL	2.05	PQL	mg/Kg	U	B, F
SODIUM	85.7	J	17.1	MDL	103	PQL	mg/Kg	J	Z
TIN	2.90	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	0.941	J	0.852	MDL	5.13	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-861-SA5A-SB-4.0-5.0 *Collected:* 6/5/2013 3:05:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.848	J	0.0738	MDL	1.10	PQL	mg/Kg	J	Z
BORON	1.38	J	0.914	MDL	11.0	PQL	mg/Kg	J	Z
CADMIUM	0.213	J	0.0363	MDL	1.10	PQL	mg/Kg	U	F
MOLYBDENUM	0.291	J	0.187	MDL	2.20	PQL	mg/Kg	U	B, F
SODIUM	94.9	J	18.4	MDL	110	PQL	mg/Kg	J	Z
TIN	3.18	J	0.242	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.70	J	0.914	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-7.0-8.0 *Collected:* 6/5/2013 3:15:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.748	J	0.0728	MDL	1.09	PQL	mg/Kg	J	Z
BORON	1.64	J	0.901	MDL	10.9	PQL	mg/Kg	J	Z
CADMIUM	0.217	J	0.0358	MDL	1.09	PQL	mg/Kg	U	F
MOLYBDENUM	0.349	J	0.185	MDL	2.17	PQL	mg/Kg	U	B, F
TIN	3.21	J	0.239	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.53	J	0.901	MDL	5.43	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-772-SA5A-SB-0.0-0.5 *Collected:* 6/4/2013 2:25:00 PM *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0763	J	0.0212	MDL	0.212	PQL	mg/Kg	J	Z

Sample ID: SL-811-SA5A-SB-0.0-0.5 *Collected:* 6/5/2013 8:45:00 AM *Analysis Type:* REA/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0983	MDL	0.393	PQL	mg/Kg	J	Z

Sample ID: SL-811-SA5A-SB-0.0-0.5 *Collected:* 6/5/2013 8:45:00 AM *Analysis Type:* RES/TOT *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0439	J	0.0197	MDL	0.197	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: **SL-811-SA5A-SB-5.5-6.5** *Collected:* **6/5/2013 9:00:00 AM** *Analysis Type:* **REA/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.102	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: **SL-811-SA5A-SB-5.5-6.5** *Collected:* **6/5/2013 9:00:00 AM** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0326	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

Sample ID: **SL-813-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 9:45:00 AM** *Analysis Type:* **REA/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.100	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: **SL-813-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 9:45:00 AM** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0493	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 10:25:00** *Analysis Type:* **REA/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.101	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 10:25:00** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.105	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z
THALLIUM	0.199	J	0.0304	MDL	0.202	PQL	mg/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-4.0-5.0** *Collected:* **6/5/2013 10:40:00** *Analysis Type:* **RES/TOT** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0530	J	0.0209	MDL	0.209	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-858-SA5A-SB-0.0-0.5 **Collected: 6/5/2013 1:50:00 PM** **Analysis Type: REA/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.103	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-858-SA5A-SB-0.0-0.5 **Collected: 6/5/2013 1:50:00 PM** **Analysis Type: RES/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0750	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-0.0-0.5 **Collected: 6/5/2013 2:20:00 PM** **Analysis Type: REA/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.103	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-0.0-0.5 **Collected: 6/5/2013 2:20:00 PM** **Analysis Type: RES/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0831	J	0.0205	MDL	0.205	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-4.0-5.0 **Collected: 6/5/2013 3:05:00 PM** **Analysis Type: RES/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0513	J	0.0220	MDL	0.220	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-7.0-8.0 **Collected: 6/5/2013 3:15:00 PM** **Analysis Type: REA/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.109	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-7.0-8.0 **Collected: 6/5/2013 3:15:00 PM** **Analysis Type: RES/TOT** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0767	J	0.0217	MDL	0.217	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-811-SA5A-SB-0.0-0.5 *Collected:* 6/5/2013 8:45:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0128	J	0.010	MDL	0.0167	PQL	mg/Kg	J	Z

Sample ID: SL-811-SA5A-SB-5.5-6.5 *Collected:* 6/5/2013 9:00:00 AM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0121	J	0.0103	MDL	0.0171	PQL	mg/Kg	J	Z

Sample ID: SL-814-SA5A-SB-0.0-0.5 *Collected:* 6/5/2013 10:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0118	J	0.0098	MDL	0.0163	PQL	mg/Kg	J	Z

Sample ID: SL-814-SA5A-SB-4.0-5.0 *Collected:* 6/5/2013 10:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0104	MDL	0.0173	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-4.0-5.0 *Collected:* 6/5/2013 3:05:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0148	J	0.0103	MDL	0.0171	PQL	mg/Kg	J	Z

Sample ID: SL-861-SA5A-SB-7.0-8.0 *Collected:* 6/5/2013 3:15:00 PM *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0174	J	0.0111	MDL	0.0185	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB1-060513 *Collected:* 6/5/2013 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.564	JBQ	0.358	MDL	9.84	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.08	JB	0.141	MDL	9.84	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB1-060513 ***Collected:*** 6/5/2013 3:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.856	JBQ	0.171	MDL	9.84	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.782	JBQ	0.260	MDL	9.84	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.953	JB	0.124	MDL	9.84	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.757	JB	0.280	MDL	9.84	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.500	JBQ	0.127	MDL	9.84	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.680	JBQ	0.290	MDL	9.84	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.638	JBQ	0.141	MDL	9.84	PQL	pg/L	U	B
1,2,3,7,8-PECDD	1.12	JQ	0.410	MDL	9.84	PQL	pg/L	J	Z
1,2,3,7,8-PECDF	1.03	JBQ	0.249	MDL	9.84	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.559	JBQ	0.119	MDL	9.84	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.922	JBQ	0.208	MDL	9.84	PQL	pg/L	U	B
2,3,7,8-TCDD	0.532	J	0.363	MDL	1.97	PQL	pg/L	J	Z
OCDD	1.89	JBQ	0.360	MDL	19.7	PQL	pg/L	U	B
OCDF	0.876	JBQ	0.438	MDL	19.7	PQL	pg/L	U	B

Sample ID: EB2-060513 ***Collected:*** 6/5/2013 3:30:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.56	JB	0.190	MDL	9.86	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.03	JB	0.0700	MDL	9.86	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.789	JB	0.0934	MDL	9.86	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.588	JBQ	0.152	MDL	9.86	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.680	JBQ	0.0898	MDL	9.86	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.578	JBQ	0.0916	MDL	9.86	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.581	JBQ	0.158	MDL	9.86	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.13	JB	0.0953	MDL	9.86	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.757	JQ	0.180	MDL	9.86	PQL	pg/L	J	Z
1,2,3,7,8-PECDF	0.765	JBQ	0.110	MDL	9.86	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.471	JB	0.0867	MDL	9.86	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.608	JBQ	0.0919	MDL	9.86	PQL	pg/L	U	B
2,3,7,8-TCDD	0.670	J	0.162	MDL	1.97	PQL	pg/L	J	Z
2,3,7,8-TCDF	0.188	JQ	0.149	MDL	1.97	PQL	pg/L	J	Z
OCDD	5.08	JB	0.240	MDL	19.7	PQL	pg/L	U	B
OCDF	1.26	JB	0.216	MDL	19.7	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-772-SA5A-SB-0.0-0.5** *Collected:* **6/4/2013 2:25:00 PM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.350	JBQ	0.0162	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.159	JBQ	0.00875	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.160	JB	0.0166	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.114	JBQ	0.0150	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.128	JB	0.0106	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.170	JB	0.0165	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.126	JBQ	0.00897	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.305	JB	0.0156	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.136	JB	0.0123	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.111	JBQ	0.0205	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.124	JB	0.00886	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.147	JB	0.00919	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.101	JB	0.00864	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0458	JBQ	0.0198	MDL	1.08	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0152	JQ	0.0126	MDL	1.08	PQL	ng/Kg	J	Z
OCDD	2.41	JB	0.0168	MDL	10.8	PQL	ng/Kg	J	Z
OCDF	0.366	JBQ	0.0185	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-811-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 8:45:00 AM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.884	JB	0.0239	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.848	JB	0.0295	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.357	JB	0.0201	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.10	JB	0.0313	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.446	JB	0.0184	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.28	JB	0.0302	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.371	JB	0.0230	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.509	JB	0.0328	MDL	5.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.192	JB	0.0139	MDL	5.02	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.512	JB	0.0183	MDL	5.02	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.219	JB	0.0133	MDL	5.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.111	JB	0.0202	MDL	1.00	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0955	J	0.0238	MDL	1.00	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-811-SA5A-SB-5.5-6.5** *Collected:* **6/5/2013 9:00:00 AM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.703	JB	0.0173	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.245	JB	0.00693	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.101	JB	0.0125	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.151	JBQ	0.0151	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.164	JB	0.00934	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.164	JB	0.0161	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.146	JB	0.00860	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.236	JBQ	0.0165	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.178	JB	0.0120	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.112	JB	0.0178	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.125	JBQ	0.00892	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.165	JB	0.00808	MDL	5.18	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.119	JB	0.00850	MDL	5.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0212	J	0.0124	MDL	1.04	PQL	ng/Kg	J	Z
OCDD	7.20	JB	0.0149	MDL	10.4	PQL	ng/Kg	J	Z
OCDF	0.635	JB	0.0152	MDL	10.4	PQL	ng/Kg	J	Z

Sample ID: **SL-813-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 9:45:00 AM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.95	JB	0.0131	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.303	JBQ	0.0263	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.575	JB	0.0315	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.242	JBQ	0.0238	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.56	JB	0.0340	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.255	JB	0.0207	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.45	JB	0.0319	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.303	JB	0.0266	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.362	JB	0.0342	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.514	JB	0.0192	MDL	4.95	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.301	JB	0.0214	MDL	4.95	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.370	JB	0.0190	MDL	4.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0757	JB	0.0291	MDL	0.990	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.257	J	0.0412	MDL	0.990	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-814-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 10:25:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.987	JB	0.0275	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.627	JB	0.0287	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.429	JB	0.0240	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.74	JB	0.0312	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.513	JB	0.0222	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.34	JB	0.0284	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.346	JB	0.0270	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.277	JB	0.0292	MDL	4.89	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.286	JB	0.0181	MDL	4.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.570	JB	0.0210	MDL	4.89	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.215	JB	0.0185	MDL	4.89	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0318	JBQ	0.0210	MDL	0.978	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.150	J	0.0370	MDL	0.978	PQL	ng/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-4.0-5.0** *Collected:* **6/5/2013 10:40:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.132	JBQ	0.0124	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0580	JB	0.00560	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0414	JBQ	0.00983	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0398	JBQ	0.0111	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0618	JBQ	0.00708	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0409	JB	0.0118	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0515	JBQ	0.00655	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0544	JBQ	0.0118	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0399	JB	0.00803	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0797	JBQ	0.0138	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.116	JB	0.00782	MDL	5.12	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0522	JBQ	0.00592	MDL	5.12	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0784	JB	0.00772	MDL	5.12	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0188	JBQ	0.0142	MDL	1.02	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0310	JQ	0.0109	MDL	1.02	PQL	ng/Kg	J	Z
OCDD	1.05	JB	0.0146	MDL	10.2	PQL	ng/Kg	U	B
OCDF	0.115	JB	0.0142	MDL	10.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-858-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 1:50:00 PM** ***Analysis Type:*** **DL** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	101000	BE	0.0983	MDL	10.1	PQL	ng/Kg	J	*XI

Sample ID: **SL-858-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 1:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3820	BE	0.209	MDL	5.07	PQL	ng/Kg	J	*XI
1,2,3,7,8-PECDF	2.82	JB	0.0340	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.16	JB	0.0319	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.639	J	0.0586	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: **SL-861-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 2:20:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.02	JB	0.0409	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.54	JB	0.0361	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.25	JB	0.0257	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.835	JB	0.0266	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.537	JB	0.0287	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.04	JB	0.0517	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.23	JB	0.0312	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.04	JB	0.0240	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.680	JB	0.0291	MDL	5.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.324	JB	0.0319	MDL	1.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.584	J	0.0519	MDL	1.02	PQL	ng/Kg	J	Z

Sample ID: **SL-861-SA5A-SB-4.0-5.0** ***Collected:*** **6/5/2013 3:05:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.20	JB	0.0312	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.399	JB	0.0144	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.115	JBQ	0.0279	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0322	JBQ	0.0165	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0432	JBQ	0.0149	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0292	JBQ	0.0175	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0325	JBQ	0.0135	MDL	5.26	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-861-SA5A-SB-4.0-5.0 *Collected:* 6/5/2013 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.0776	JBQ	0.0180	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0204	JBQ	0.0182	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0535	JBQ	0.00837	MDL	5.26	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0267	JBQ	0.0131	MDL	5.26	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0263	JBQ	0.00848	MDL	5.26	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0172	JB	0.0152	MDL	1.05	PQL	ng/Kg	U	B
OCDF	1.28	JB	0.0219	MDL	10.5	PQL	ng/Kg	J	Z

Sample ID: SL-861-SA5A-SB-7.0-8.0 *Collected:* 6/5/2013 3:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.613	JB	0.0275	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.159	JB	0.0129	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0728	JB	0.0214	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0276	JBQ	0.0154	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0424	JBQ	0.0116	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0560	JB	0.0161	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0701	JBQ	0.0169	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0399	JBQ	0.0139	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0713	JBQ	0.00772	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0514	JBQ	0.0106	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0198	JBQ	0.00749	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0172	JBQ	0.0132	MDL	1.10	PQL	ng/Kg	U	B
OCDD	7.57	JB	0.0331	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.363	JB	0.0309	MDL	11.0	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: EB1-060513 *Collected:* 6/5/2013 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.10	U	0.051	MDL	0.10	PQL	mg/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: EB2-060513 *Collected:* 6/5/2013 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.10	U	0.051	MDL	0.10	PQL	mg/L	UJ	L

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-772-SA5A-SB-0.0-0.5 *Collected:* 6/4/2013 2:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.1	J	2.2	MDL	5.5	PQL	mg/Kg	J	Z, Q

Method Category: SVOA

Method: 8082A **Matrix: AQ**

Sample ID: EB2-060513 *Collected:* 6/5/2013 3:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1221	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1232	0.43	U	0.17	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1242	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1248	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1254	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
AROCLOR 1260	0.43	U	0.13	MDL	0.43	PQL	ug/L	UJ	S
Aroclor 1262	0.43	U	0.17	MDL	0.43	PQL	ug/L	UJ	S
Aroclor 1268	0.43	U	0.14	MDL	0.43	PQL	ug/L	UJ	S
Aroclor 5432	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
Aroclor 5442	0.43	U	0.085	MDL	0.43	PQL	ug/L	UJ	S
Aroclor 5460	0.43	U	0.094	MDL	0.43	PQL	ug/L	UJ	S

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: AQ**

Sample ID: **EB1-060513** *Collected:* **6/5/2013 3:00:00 PM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.015	J	0.010	MDL	0.051	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.087	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Diethylphthalate	0.090	J	0.051	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.11	J	0.051	MDL	1.0	PQL	ug/L	J	Z

Sample ID: **EB2-060513** *Collected:* **6/5/2013 3:30:00 PM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.012	J	0.011	MDL	0.054	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.016	J	0.011	MDL	0.054	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.12	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Diethylphthalate	0.092	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.11	J	0.054	MDL	1.1	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-772-SA5A-SB-0.0-0.5** *Collected:* **6/4/2013 2:25:00 PM** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.97	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.96	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-811-SA5A-SB-0.0-0.5** *Collected:* **6/5/2013 8:45:00 AM** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: SVOA

Method: 8270D SIM **Matrix: SO**

Sample ID: **SL-811-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 8:45:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	0.88	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-813-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 9:45:00 AM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.82	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.0	J	6.1	MDL	18	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-814-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.58	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.74	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.77	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.69	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.71	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.90	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-858-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 1:50:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	5.9	J	3.5	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	17	J	7.0	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	17	J	7.0	MDL	18	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	14	J	7.0	MDL	18	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	16	J	7.0	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	9.5	J	7.0	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method Category: **SVOA**

Method: **8270D SIM** ***Matrix:*** **SO**

Sample ID: **SL-861-SA5A-SB-0.0-0.5** ***Collected:*** **6/5/2013 2:20:00 PM** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **10**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
BENZO(A)ANTHRACENE	8.5	J	6.9	MDL	17	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.6	J	6.9	MDL	17	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.9	J	6.9	MDL	17	PQL	ug/Kg	J	Z
PHENANTHRENE	16	J	6.9	MDL	17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Reason Code Legend

Reason Code	*Description*
*XI	Exceeded Calibration Range
A	Professional Judgment
B	Calibration Blank Contamination
B	Method Blank Contamination
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Upper Estimation
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

PH047

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1630B370025	6/15/2013 12:25:00 AM	1,2,3,4,6,7,8-HPCDD	0.980 pg/L	EB1-060513
		1,2,3,4,6,7,8-HPCDF	0.301 pg/L	EB2-060513
		1,2,3,4,7,8,9-HPCDF	0.419 pg/L	
		1,2,3,4,7,8-HxCDD	0.615 pg/L	
		1,2,3,4,7,8-HXCDF	0.641 pg/L	
		1,2,3,6,7,8-HXCDD	0.347 pg/L	
		1,2,3,6,7,8-HXCDF	0.422 pg/L	
		1,2,3,7,8,9-HXCDD	0.422 pg/L	
		1,2,3,7,8,9-HXCDF	0.484 pg/L	
		1,2,3,7,8-PECDF	0.764 pg/L	
		2,3,4,6,7,8-HXCDF	0.455 pg/L	
		2,3,4,7,8-PECDF	0.681 pg/L	
		OCDD	1.19 pg/L	
		OCDF	0.788 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-060513(RES)	1,2,3,4,6,7,8-HPCDD	0.564 pg/L	0.564U pg/L
EB1-060513(RES)	1,2,3,4,6,7,8-HPCDF	1.08 pg/L	1.08U pg/L
EB1-060513(RES)	1,2,3,4,7,8,9-HPCDF	0.856 pg/L	0.856U pg/L
EB1-060513(RES)	1,2,3,4,7,8-HxCDD	0.782 pg/L	0.782U pg/L
EB1-060513(RES)	1,2,3,4,7,8-HXCDF	0.953 pg/L	0.953U pg/L
EB1-060513(RES)	1,2,3,6,7,8-HXCDD	0.757 pg/L	0.757U pg/L
EB1-060513(RES)	1,2,3,6,7,8-HXCDF	0.500 pg/L	0.500U pg/L
EB1-060513(RES)	1,2,3,7,8,9-HXCDD	0.680 pg/L	0.680U pg/L
EB1-060513(RES)	1,2,3,7,8,9-HXCDF	0.638 pg/L	0.638U pg/L
EB1-060513(RES)	1,2,3,7,8-PECDF	1.03 pg/L	1.03U pg/L
EB1-060513(RES)	2,3,4,6,7,8-HXCDF	0.559 pg/L	0.559U pg/L
EB1-060513(RES)	2,3,4,7,8-PECDF	0.922 pg/L	0.922U pg/L
EB1-060513(RES)	OCDD	1.89 pg/L	1.89U pg/L
EB1-060513(RES)	OCDF	0.876 pg/L	0.876U pg/L
EB2-060513(RES)	1,2,3,4,6,7,8-HPCDD	1.56 pg/L	1.56U pg/L
EB2-060513(RES)	1,2,3,4,6,7,8-HPCDF	1.03 pg/L	1.03U pg/L
EB2-060513(RES)	1,2,3,4,7,8,9-HPCDF	0.789 pg/L	0.789U pg/L
EB2-060513(RES)	1,2,3,4,7,8-HxCDD	0.588 pg/L	0.588U pg/L
EB2-060513(RES)	1,2,3,4,7,8-HXCDF	0.680 pg/L	0.680U pg/L
EB2-060513(RES)	1,2,3,6,7,8-HXCDF	0.578 pg/L	0.578U pg/L
EB2-060513(RES)	1,2,3,7,8,9-HXCDD	0.581 pg/L	0.581U pg/L
EB2-060513(RES)	1,2,3,7,8,9-HXCDF	1.13 pg/L	1.13U pg/L

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-060513(RES)	1,2,3,7,8-PECDF	0.765 pg/L	0.765U pg/L
EB2-060513(RES)	2,3,4,6,7,8-HXCDF	0.471 pg/L	0.471U pg/L
EB2-060513(RES)	2,3,4,7,8-PECDF	0.608 pg/L	0.608U pg/L
EB2-060513(RES)	OCDD	5.08 pg/L	5.08U pg/L
EB2-060513(RES)	OCDF	1.26 pg/L	1.26U pg/L

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1630B371055	6/15/2013 10:55:00 AM	1,2,3,4,6,7,8-HPCDD	0.0612 ng/Kg	SL-772-SA5A-SB-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0525 ng/Kg	SL-811-SA5A-SB-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0372 ng/Kg	SL-811-SA5A-SB-5.5-6.5
		1,2,3,4,7,8-HxCDD	0.0141 ng/Kg	SL-813-SA5A-SB-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0365 ng/Kg	SL-814-SA5A-SB-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0191 ng/Kg	SL-814-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0232 ng/Kg	SL-858-SA5A-SB-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0376 ng/Kg	SL-861-SA5A-SB-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0595 ng/Kg	SL-861-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0468 ng/Kg	SL-861-SA5A-SB-7.0-8.0
		1,2,3,7,8-PECDF	0.0591 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0280 ng/Kg	
		2,3,4,7,8-PECDF	0.0223 ng/Kg	
		2,3,7,8-TCDD	0.0555 ng/Kg	
		OCDD	0.295 ng/Kg	
		OCDF	0.0998 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.159 ng/Kg	0.159U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.160 ng/Kg	0.160U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.136 ng/Kg	0.136U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0458 ng/Kg	0.0458U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.136 ng/Kg	0.136U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0458 ng/Kg	0.0458U ng/Kg
SL-772-SA5A-SB-0.0-0.5(RES)	OCDF	0.366 ng/Kg	0.366U ng/Kg
SL-811-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.192 ng/Kg	0.192U ng/Kg
SL-811-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.111 ng/Kg	0.111U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,4,6,7,8-HPCDF	0.245 ng/Kg	0.245U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,4,7,8,9-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,4,7,8-HXCDF	0.164 ng/Kg	0.164U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,7,8,9-HXCDF	0.178 ng/Kg	0.178U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,7,8-PECDD	0.112 ng/Kg	0.112U ng/Kg
SL-811-SA5A-SB-5.5-6.5(RES)	1,2,3,7,8-PECDF	0.125 ng/Kg	0.125U ng/Kg
SL-813-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0757 ng/Kg	0.0757U ng/Kg
SL-814-SA5A-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-814-SA5A-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0318 ng/Kg	0.0318U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.132 ng/Kg	0.132U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0580 ng/Kg	0.0580U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0414 ng/Kg	0.0414U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0398 ng/Kg	0.0398U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0618 ng/Kg	0.0618U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0409 ng/Kg	0.0409U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0515 ng/Kg	0.0515U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0544 ng/Kg	0.0544U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0399 ng/Kg	0.0399U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0797 ng/Kg	0.0797U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.116 ng/Kg	0.116U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0522 ng/Kg	0.0522U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0784 ng/Kg	0.0784U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0188 ng/Kg	0.0188U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-814-SA5A-SB-4.0-5.0(RES)	OCDD	1.05 ng/Kg	1.05U ng/Kg
SL-814-SA5A-SB-4.0-5.0(RES)	OCDF	0.115 ng/Kg	0.115U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.115 ng/Kg	0.115U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0322 ng/Kg	0.0322U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0432 ng/Kg	0.0432U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0292 ng/Kg	0.0292U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0325 ng/Kg	0.0325U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0776 ng/Kg	0.0776U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0204 ng/Kg	0.0204U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0535 ng/Kg	0.0535U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0267 ng/Kg	0.0267U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0263 ng/Kg	0.0263U ng/Kg
SL-861-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0172 ng/Kg	0.0172U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,4,6,7,8-HPCDF	0.159 ng/Kg	0.159U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0728 ng/Kg	0.0728U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HxCDD	0.0276 ng/Kg	0.0276U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,4,7,8-HXCDF	0.0424 ng/Kg	0.0424U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,6,7,8-HXCDD	0.0560 ng/Kg	0.0560U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDD	0.0701 ng/Kg	0.0701U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8,9-HXCDF	0.0399 ng/Kg	0.0399U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	1,2,3,7,8-PECDF	0.0713 ng/Kg	0.0713U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	2,3,4,6,7,8-HXCDF	0.0514 ng/Kg	0.0514U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	2,3,4,7,8-PECDF	0.0198 ng/Kg	0.0198U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	2,3,7,8-TCDD	0.0172 ng/Kg	0.0172U ng/Kg
SL-861-SA5A-SB-7.0-8.0(RES)	OCDF	0.363 ng/Kg	0.363U ng/Kg

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16435AB220135	6/17/2013 1:35:00 AM	CADMIUM	0.00045 mg/L	EB1-060513 EB2-060513

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-060513(REA4/TOT)	CADMIUM	0.00036 mg/L	0.00036U mg/L
EB2-060513(REA4/TOT)	CADMIUM	0.00048 mg/L	0.00048U mg/L

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037CB220935	6/13/2013 9:35:00 AM	CALCIUM	6.15 mg/Kg	SL-772-SA5A-SB-0.0-0.5 SL-811-SA5A-SB-0.0-0.5 SL-811-SA5A-SB-5.5-6.5 SL-813-SA5A-SB-0.0-0.5 SL-814-SA5A-SB-0.0-0.5 SL-814-SA5A-SB-4.0-5.0 SL-858-SA5A-SB-0.0-0.5 SL-861-SA5A-SB-0.0-0.5 SL-861-SA5A-SB-4.0-5.0 SL-861-SA5A-SB-7.0-8.0
P16037CB222021	6/12/2013 8:21:00 PM	IRON PHOSPHORUS TIN	4.39 mg/Kg 1.17 mg/Kg 1.43 mg/Kg	SL-772-SA5A-SB-0.0-0.5 SL-811-SA5A-SB-0.0-0.5 SL-811-SA5A-SB-5.5-6.5 SL-813-SA5A-SB-0.0-0.5 SL-814-SA5A-SB-0.0-0.5 SL-814-SA5A-SB-4.0-5.0 SL-858-SA5A-SB-0.0-0.5 SL-861-SA5A-SB-0.0-0.5 SL-861-SA5A-SB-4.0-5.0 SL-861-SA5A-SB-7.0-8.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-772-SA5A-SB-0.0-0.5(RES/TOT)	TIN	3.84 mg/Kg	3.84U mg/Kg
SL-811-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-811-SA5A-SB-5.5-6.5(RES/TOT)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-813-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-814-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-814-SA5A-SB-4.0-5.0(RES/TOT)	TIN	3.14 mg/Kg	3.14U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-858-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-861-SA5A-SB-0.0-0.5(RES/TOT)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-861-SA5A-SB-4.0-5.0(RES/TOT)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-861-SA5A-SB-7.0-8.0(RES/TOT)	TIN	3.21 mg/Kg	3.21U mg/Kg

Method: **8270D SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWE16B262219	6/15/2013 10:19:00 PM	Diethylphthalate	0.076 ug/L	EB1-060513
		N-NITROSODIMETHYLAMINE	0.71 ug/L	EB2-060513

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-060513(RES)	Diethylphthalate	0.090 ug/L	1.0U ug/L
EB2-060513(RES)	Diethylphthalate	0.092 ug/L	1.1U ug/L

Field Blank Outlier Report

Lab Reporting Batch ID: PH047

Laboratory: LL

EDD Filename: PrepPH047_v1

eQAPP Name: CDM_SSFL_130705_Lan

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2/TOT)	4/11/2013 3:00:00 PM	COPPER	0.0036 mg/L	SL-772-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0036 mg/L	SL-811-SA5A-SB-0.0-0.5
				SL-811-SA5A-SB-5.5-6.5
				SL-813-SA5A-SB-0.0-0.5
				SL-814-SA5A-SB-0.0-0.5
				SL-814-SA5A-SB-4.0-5.0
				SL-858-SA5A-SB-0.0-0.5
				SL-861-SA5A-SB-0.0-0.5
				SL-861-SA5A-SB-4.0-5.0
				SL-861-SA5A-SB-7.0-8.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-772-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.807 mg/Kg	0.807U mg/Kg
SL-811-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.170 mg/Kg	0.170U mg/Kg
SL-811-SA5A-SB-5.5-6.5(RES/TOT)	MOLYBDENUM	0.181 mg/Kg	0.181U mg/Kg
SL-813-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.251 mg/Kg	0.251U mg/Kg
SL-858-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.206 mg/Kg	0.206U mg/Kg
SL-861-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.257 mg/Kg	0.257U mg/Kg
SL-861-SA5A-SB-4.0-5.0(RES/TOT)	MOLYBDENUM	0.291 mg/Kg	0.291U mg/Kg
SL-861-SA5A-SB-7.0-8.0(RES/TOT)	MOLYBDENUM	0.349 mg/Kg	0.349U mg/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-060513(REA4/TOT)	6/5/2013 3:00:00 PM	BARIUM	0.00045 mg/L	SL-772-SA5A-SB-0.0-0.5
		CADMIUM	0.00036 mg/L	SL-811-SA5A-SB-0.0-0.5
		MOLYBDENUM	0.0084 mg/L	SL-811-SA5A-SB-5.5-6.5
				SL-814-SA5A-SB-0.0-0.5
				SL-814-SA5A-SB-4.0-5.0
EB2-060513(REA4/TOT)	6/5/2013 3:30:00 PM	CADMIUM	0.00048 mg/L	SL-813-SA5A-SB-0.0-0.5
				SL-858-SA5A-SB-0.0-0.5
				SL-861-SA5A-SB-0.0-0.5
				SL-861-SA5A-SB-4.0-5.0
				SL-861-SA5A-SB-7.0-8.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-772-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.807 mg/Kg	0.807U mg/Kg
SL-811-SA5A-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.170 mg/Kg	0.170U mg/Kg
SL-811-SA5A-SB-5.5-6.5(RES/TOT)	MOLYBDENUM	0.181 mg/Kg	0.181U mg/Kg
SL-861-SA5A-SB-4.0-5.0(RES/TOT)	CADMIUM	0.213 mg/Kg	0.213U mg/Kg
SL-861-SA5A-SB-7.0-8.0(RES/TOT)	CADMIUM	0.217 mg/Kg	0.217U mg/Kg

Surrogate Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **8082A**
Matrix: **AQ**

Sample ID (Analysis Type)	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB2-060513	DECACHLOROBIPHENYL	26	45.00-120.00	All Target Analytes	J (all detects) UJ (all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

***Method:* 8015M**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-772-SA5A-SB-0.0-0.5MS **SL-772-SA5A-SB-0.0-0.5MSD** (SL-772-SA5A-SB-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	131 -	145 130	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	J (all detects)
SL-772-SA5A-SB-0.0-0.5MS **SL-772-SA5A-SB-0.0-0.5MSD** (SL-772-SA5A-SB-0.0-0.5)	EFH (C15-C20)	17	24	49.00-123.00	-	EFH (C15-C20)	J(all detects) UJ(all non-detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 5A

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31615AQ321553A (EB1-060513 EB2-060513)	EFH (C8-C11)	68	-	70.00-130.00	-	EFH (C8-C11)	J (all detects) UJ (all non-detects)

Method: 8270D SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1WELCSY262313 (EB1-060513 EB2-060513)	PHENANTHRENE	-	110	72.00-109.00	-	PHENANTHRENE	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-060513	1,2,3,4,6,7,8-HPCDD	JBQ	0.564	9.84	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	1.08	9.84	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.856	9.84	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.782	9.84	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.953	9.84	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	0.757	9.84	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.500	9.84	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.680	9.84	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.638	9.84	PQL	pg/L	
	1,2,3,7,8-PECDD	JQ	1.12	9.84	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	1.03	9.84	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.559	9.84	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.922	9.84	PQL	pg/L	
	2,3,7,8-TCDD	J	0.532	1.97	PQL	pg/L	
	OCDD	JBQ	1.89	19.7	PQL	pg/L	
	OCDF	JBQ	0.876	19.7	PQL	pg/L	
EB2-060513	1,2,3,4,6,7,8-HPCDD	JB	1.56	9.86	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	1.03	9.86	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.789	9.86	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.588	9.86	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.680	9.86	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.578	9.86	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.581	9.86	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	1.13	9.86	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDD	JQ	0.757	9.86	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.765	9.86	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.471	9.86	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.608	9.86	PQL	pg/L	
	2,3,7,8-TCDD	J	0.670	1.97	PQL	pg/L	
	2,3,7,8-TCDF	JQ	0.188	1.97	PQL	pg/L	
	OCDD	JB	5.08	19.7	PQL	pg/L	
	OCDF	JB	1.26	19.7	PQL	pg/L	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-060513	BARIUM	J	0.00045	0.0100	PQL	mg/L	
	CADMIUM	J	0.00036	0.0100	PQL	mg/L	J (all detects)
	MOLYBDENUM	J	0.0084	0.0200	PQL	mg/L	
EB2-060513	CADMIUM	J	0.00048	0.0100	PQL	mg/L	J (all detects)

Method: 8270D SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-060513	2-METHYLNAPHTHALENE	J	0.015	0.051	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.087	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.090	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.11	1.0	PQL	ug/L	
EB2-060513	1-Methylnaphthalene	J	0.012	0.054	PQL	ug/L	
	2-METHYLNAPHTHALENE	J	0.016	0.054	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.12	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.092	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.11	1.1	PQL	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-772-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.350	5.41	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.159	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.160	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.114	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.128	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.170	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.126	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.305	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.136	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.111	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.124	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.147	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.101	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0458	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0152	1.08	PQL	ng/Kg	
	OCDD	JB	2.41	10.8	PQL	ng/Kg	
	OCDF	JBQ	0.366	10.8	PQL	ng/Kg	
SL-811-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.884	5.02	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.848	5.02	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.357	5.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.10	5.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.446	5.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.28	5.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.371	5.02	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.509	5.02	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.192	5.02	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.512	5.02	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.219	5.02	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.111	1.00	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0955	1.00	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-811-SA5A-SB-5.5-6.5	1,2,3,4,6,7,8-HPCDD	JB	0.703	5.18	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.245	5.18	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.101	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.151	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.164	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.164	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.146	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.236	5.18	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.178	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.112	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.125	5.18	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.165	5.18	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.119	5.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0212	1.04	PQL	ng/Kg	
	OCDD	JB	7.20	10.4	PQL	ng/Kg	
	OCDF	JB	0.635	10.4	PQL	ng/Kg	
SL-813-SA5A-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.95	4.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.303	4.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.575	4.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.242	4.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.56	4.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.255	4.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.45	4.95	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.303	4.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.362	4.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.514	4.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.301	4.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.370	4.95	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0757	0.990	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.257	0.990	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-814-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.987	4.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.627	4.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.429	4.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.74	4.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.513	4.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.34	4.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.346	4.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.277	4.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.286	4.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.570	4.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.215	4.89	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0318	0.978	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.150	0.978	PQL	ng/Kg	
SL-814-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.132	5.12	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0580	5.12	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0414	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0398	5.12	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0618	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0409	5.12	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0515	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0544	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0399	5.12	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0797	5.12	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.116	5.12	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0522	5.12	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0784	5.12	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0188	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0310	1.02	PQL	ng/Kg	
	OCDD	JB	1.05	10.2	PQL	ng/Kg	
	OCDF	JB	0.115	10.2	PQL	ng/Kg	
SL-858-SA5A-SB-0.0-0.5	1,2,3,7,8-PECDF	JB	2.82	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.16	5.07	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDF	J	0.639	1.01	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-861-SA5A-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.02	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.54	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.25	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.835	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.537	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.04	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.23	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.04	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.680	5.08	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.324	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.584	1.02	PQL	ng/Kg	
SL-861-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.20	5.26	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.399	5.26	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.115	5.26	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0322	5.26	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0432	5.26	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0292	5.26	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0325	5.26	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.0776	5.26	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0204	5.26	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0535	5.26	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0267	5.26	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0263	5.26	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0172	1.05	PQL	ng/Kg	
	OCDF	JB	1.28	10.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-861-SA5A-SB-7.0-8.0	1,2,3,4,6,7,8-HPCDD	JB	0.613	5.49	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.159	5.49	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0728	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0276	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0424	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0560	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0701	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0399	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0713	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0514	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0198	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0172	1.10	PQL	ng/Kg	
	OCDD	JB	7.57	11.0	PQL	ng/Kg	
	OCDF	JB	0.363	11.0	PQL	ng/Kg	

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-772-SA5A-SB-0.0-0.5	MOLYBDENUM	J	0.807	2.12	PQL	mg/Kg	
	TIN	J	3.84	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.18	5.31	PQL	mg/Kg	
SL-811-SA5A-SB-0.0-0.5	BERYLLIUM	J	0.630	0.983	PQL	mg/Kg	
	BORON	J	3.25	9.83	PQL	mg/Kg	
	CADMIUM	J	0.418	0.983	PQL	mg/Kg	
	MOLYBDENUM	J	0.170	1.97	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.3	98.3	PQL	mg/Kg	
	TIN	J	2.79	9.83	PQL	mg/Kg	
	Zirconium	J	1.15	4.91	PQL	mg/Kg	
SL-811-SA5A-SB-5.5-6.5	BERYLLIUM	J	0.724	1.02	PQL	mg/Kg	
	BORON	J	2.11	10.2	PQL	mg/Kg	
	CADMIUM	J	0.309	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.181	2.04	PQL	mg/Kg	J (all detects)
	SODIUM	J	98.6	102	PQL	mg/Kg	
	TIN	J	3.13	10.2	PQL	mg/Kg	
	Zirconium	J	1.27	5.09	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-813-SA5A-SB-0.0-0.5	ARSENIC	J	3.62	4.02	PQL	mg/Kg	
	BERYLLIUM	J	0.557	1.00	PQL	mg/Kg	
	BORON	J	3.44	10.0	PQL	mg/Kg	
	CADMIUM	J	0.507	1.00	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.251	2.01	PQL	mg/Kg	
	SODIUM	J	69.3	100	PQL	mg/Kg	
	TIN	J	2.85	10.0	PQL	mg/Kg	
SL-814-SA5A-SB-0.0-0.5	ARSENIC	J	2.96	4.05	PQL	mg/Kg	
	BERYLLIUM	J	0.403	1.01	PQL	mg/Kg	
	BORON	J	3.42	10.1	PQL	mg/Kg	
	CADMIUM	J	0.462	1.01	PQL	mg/Kg	J (all detects)
	COPPER	J	9.36	10.1	PQL	mg/Kg	
	SODIUM	J	65.7	101	PQL	mg/Kg	
	TIN	J	2.59	10.1	PQL	mg/Kg	
	Zirconium	J	1.02	5.06	PQL	mg/Kg	
SL-814-SA5A-SB-4.0-5.0	BERYLLIUM	J	0.758	1.05	PQL	mg/Kg	
	BORON	J	2.41	10.5	PQL	mg/Kg	
	CADMIUM	J	0.334	1.05	PQL	mg/Kg	J (all detects)
	COPPER	J	9.98	10.5	PQL	mg/Kg	
	TIN	J	3.14	10.5	PQL	mg/Kg	
	Zirconium	J	1.36	5.23	PQL	mg/Kg	
SL-858-SA5A-SB-0.0-0.5	ARSENIC	J	4.00	4.12	PQL	mg/Kg	
	BERYLLIUM	J	0.567	1.03	PQL	mg/Kg	
	BORON	J	2.88	10.3	PQL	mg/Kg	
	CADMIUM	J	0.694	1.03	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.206	2.06	PQL	mg/Kg	
	SODIUM	J	87.1	103	PQL	mg/Kg	
	TIN	J	2.98	10.3	PQL	mg/Kg	
	Zirconium	J	0.902	5.15	PQL	mg/Kg	
SL-861-SA5A-SB-0.0-0.5	BERYLLIUM	J	0.606	1.03	PQL	mg/Kg	
	BORON	J	3.52	10.3	PQL	mg/Kg	
	CADMIUM	J	0.568	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.257	2.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.7	103	PQL	mg/Kg	
	TIN	J	2.90	10.3	PQL	mg/Kg	
	Zirconium	J	0.941	5.13	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-861-SA5A-SB-4.0-5.0	BERYLLIUM	J	0.848	1.10	PQL	mg/Kg	
	BORON	J	1.38	11.0	PQL	mg/Kg	
	CADMIUM	J	0.213	1.10	PQL	mg/Kg	
	MOLYBDENUM	J	0.291	2.20	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.9	110	PQL	mg/Kg	
	TIN	J	3.18	11.0	PQL	mg/Kg	
	Zirconium	J	1.70	5.51	PQL	mg/Kg	
SL-861-SA5A-SB-7.0-8.0	BERYLLIUM	J	0.748	1.09	PQL	mg/Kg	
	BORON	J	1.64	10.9	PQL	mg/Kg	
	CADMIUM	J	0.217	1.09	PQL	mg/Kg	
	MOLYBDENUM	J	0.349	2.17	PQL	mg/Kg	J (all detects)
	TIN	J	3.21	10.9	PQL	mg/Kg	
	Zirconium	J	1.53	5.43	PQL	mg/Kg	

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-772-SA5A-SB-0.0-0.5	SILVER	J	0.0763	0.212	PQL	mg/Kg	J (all detects)
SL-811-SA5A-SB-0.0-0.5	SELENIUM	J	0.135	0.393	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0439	0.197	PQL	mg/Kg	
SL-811-SA5A-SB-5.5-6.5	SELENIUM	J	0.154	0.408	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0326	0.204	PQL	mg/Kg	
SL-813-SA5A-SB-0.0-0.5	SELENIUM	J	0.130	0.402	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0493	0.201	PQL	mg/Kg	
SL-814-SA5A-SB-0.0-0.5	SELENIUM	J	0.102	0.405	PQL	mg/Kg	
	SILVER	J	0.105	0.202	PQL	mg/Kg	J (all detects)
	THALLIUM	J	0.199	0.202	PQL	mg/Kg	
SL-814-SA5A-SB-4.0-5.0	SILVER	J	0.0530	0.209	PQL	mg/Kg	J (all detects)
SL-858-SA5A-SB-0.0-0.5	SELENIUM	J	0.135	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0750	0.206	PQL	mg/Kg	
SL-861-SA5A-SB-0.0-0.5	SELENIUM	J	0.157	0.410	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0831	0.205	PQL	mg/Kg	
SL-861-SA5A-SB-4.0-5.0	SILVER	J	0.0513	0.220	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: PH047 **Laboratory: LL**

EDD Filename: PrepPH047_v1 **eQAPP Name: CDM_SSFL_130705_Lan**

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-861-SA5A-SB-7.0-8.0	SELENIUM	J	0.110	0.434	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0767	0.217	PQL	mg/Kg	

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-811-SA5A-SB-0.0-0.5	MERCURY	J	0.0128	0.0167	PQL	mg/Kg	J (all detects)
SL-811-SA5A-SB-5.5-6.5	MERCURY	J	0.0121	0.0171	PQL	mg/Kg	J (all detects)
SL-814-SA5A-SB-0.0-0.5	MERCURY	J	0.0118	0.0163	PQL	mg/Kg	J (all detects)
SL-814-SA5A-SB-4.0-5.0	MERCURY	J	0.0105	0.0173	PQL	mg/Kg	J (all detects)
SL-861-SA5A-SB-4.0-5.0	MERCURY	J	0.0148	0.0171	PQL	mg/Kg	J (all detects)
SL-861-SA5A-SB-7.0-8.0	MERCURY	J	0.0174	0.0185	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-772-SA5A-SB-0.0-0.5	EFH (C15-C20)	J	3.1	5.5	PQL	mg/Kg	J (all detects)

Method: 8270D SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-772-SA5A-SB-0.0-0.5	1-Methylnaphthalene	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.8	PQL	ug/Kg	
	ACENAPHTHENE	J	1.4	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.97	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.96	1.8	PQL	ug/Kg	
	FLUORENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.8	PQL	ug/Kg	